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ORIGINAL LECTURES.

THE TREATMENT OF CROUP.

A Clinical Lecture.

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GENTLEMEN: Membranous laryngitis is one of the diseases in which medical treatment has always been most vacillating and unsatisfactory. Our fathers, rightly regarding it as a violent inflammation, fought it determinedly with their deadliest weapons. These, in the words of an old author,[1] were "bleeding, emetics, purgatives, and blistering."

Bleeding, first, "so as nearly to produce fainting;" if not relieved, more blood "by several leeches over the trachea." After bleeding, an emetic of ipecac and antimony, to be again and again repeated if the continuance of the disease—and the patient—afforded an opportunity. At the same time—and the sooner the better—"a large blister all across the throat or upper part of the chest" was in order. It was further recommended to keep up brisk purgation with calomel and jalap throughout the entire course of the disease. These sledge-hammer blows were supplemented by frequent smaller doses of tartar-emetic and calomel. To all this was added the "antiphlogistic regimen," which, in those days, meant little nourishment and no stimulants. Unless you call to mind the cat-like tenacity of life inherent in some children, you will be surprised when I tell you that a few survived both the croup and the treatment.

We do not work in that way now. If, as is often the case, we cannot do much good with our remedies, we endeavor not to do harm, and that is more than can be said for the old way.

If the medical treatment is to be of avail, it must be instituted early. In croup, delay is not only dangerous; it is fatal. As soon as a laryngeal cough, an increasing hoarseness, and obstructed inspiration give warning, the child, *nolens volens*, should be put to bed. The room should be well warmed; from 80 to 85 degrees Fahr. is not too high. The air should be moist as well as warm. A warm and moist air is relaxing and soothing; a cold and dry air is irritating to the inflamed larynx, and tends to induce paroxysms of cough and dyspnœa. There are different ways of charging a room with moisture. If it is warmed by a cook-stove, vessels of water may be kept boiling. The objection to this plan is that, if the apartment is small, it becomes overheated. Large volumes of steam may be generated by dropping hot irons or bricks into a vessel of water. Another plan, and an excellent one, is to curtain the bed with blankets and introduce steam through a tube communicating with a vessel of water standing outside the inclosure, over a gas- or spirit-lamp. In some children, spray may be sent directly to the inflamed surface by the steam atomizer. From ten to fifteen minutes' steaming every hour or two does much to soften the cough and relieve the dyspnœa. This instrument also affords a ready means of carrying a medicated vapor to the seat of trouble. Just now lime-water is being much used, there being some evidence that it has a solvent effect on the false membrane. Though doubting whether the minute quantity of lime introduced in this way can have an appreciable effect, I would not discourage its use, since the vapor of lime water is at least as good as that of pure water. There are other solvents of pseudo-membranes. Among the best of these is, according to experiments recently made at the New York Foundling Hospital, liquor sodæ, diluted about fifty times with water, or, perhaps better, with aqua calcis; it may be used freely with the atomizer. Feeble solvent power is also claimed for both lactic acid and chlorate of potash. If any of these agents can destroy the membrane, they should *a fortiori* prevent its formation if used early enough.

If not disagreeable to the patient, I think it well to add a little carbolic acid to these atomizing fluids. Unfortunately, some children are so young and many are so perverse, that effectual use of the atomizer is very difficult. But do not fail by some one or all of these methods to furnish to the child, for at least a large part of the time, a steam-laden atmosphere.

Perhaps something may be gained by the application of mild counter-irritants over the larynx. A slice of salted fat pork, made more irritant by dusting its applied surface with mustard, or black pepper, or powdered camphor, and stitched to a cloth passing around the neck, answers a good purpose. Hot poultices, and cloths and sponges wrung from hot water, are sometimes bound upon the neck. Without great care, they wet the clothing and the upper part of the chest, and do more harm than good. Some practitioners prefer the continuous application of cold, but I have had no experience with this method.

The hoarse dry cough and the tendency to dyspnœa will suggest to you an early resort to emetics and expectorants. It used to be thought, and some are still of opinion, that there is peculiar virtue in the harsher and more depressing emetics, such as antimony and hive syrup. For myself, while not objecting to giving these agents once or twice at the outset for their emetic effect, I am not favorable to their repeated administration. Being powerfully depressant, patients kept under their influence rapidly lose strength, and I doubt if their local action is better than that of lighter emetics, such as ipecac and alum, and the sulphates of copper and zinc. My preference is for the wine or syrup of ipecac, repeated whenever it becomes necessary to produce emesis. A teaspoonful of powdered alum mixed with honey or syrup is an old and still popular remedy. Very many physicians rely wholly on the sulphate of copper as an emetic. With the act of vomiting some secretion is carried from the larynx and trachea; perhaps pieces and casts of false membrane are thrown out, and considerable relief follows, but it is seldom permanent. Before long, in most cases, the dyspnœa again becomes urgent, driving us back to emetic treatment.

Towards the end, the stomach responds less readily to emetics, because, as I suppose, the functions of the nervous system are in abeyance. I have seen large quantities of nauseants given in the last stages of croup without result.

I had almost forgotten to say that apomorphia has gained some favor as a prompt and non-depressing emetic. As little as .0015 gramme, or the fortieth of a grain, hypodermically, will effect the object.

Because emetics bring some relief to urgent symptoms, there is a liability to their over-use.

Nothing is gained by keeping a child constantly

[1] Thomas' Practice, 1815.

nauseated; on the other hand, appetite and strength are lost and rapid prostration ensues.

Aside from favoring the secretion of mucus and driving from the windpipe, *occasionally*, the accumulated products of the inflammation, I doubt if anything is to be gained by the use of these agents.

Most authors recommend the warm bath early in croup. It reduces the fever, it relaxes the system, and is a reliable adjuvant to the emetic treatment.

Until a recent date, much reliance was placed on mercury as a remedy in membranous laryngitis, on the theory that it abated inflammation and promoted the breaking down and liquefaction of the false membrane; it was used early and late in all cases.

This treatment, once so popular, has fallen into comparative desuetude. I must confess that I am not yet convinced of its uselessness, and that I still continue the practice, partly because it has happened to me to see some recoveries under it, and partly because I would not hastily abandon a remedy that has been held to be of the greatest service by many eminent physicians. I do not believe that mercurials have any effect on the already formed membrane, but I am not certain that they may not so modify and lessen the inflammation that the materials for the manufacture of this membrane are no longer furnished.

But if mercury is to be of any use in a disease of such rapidity, no time is to be lost in bringing the system under its influence. Unless we can so give it as to insure prompt action, we had better not give it at all. I like the plan of small doses often administered. From .01 to .03 gramme—⅙ to ½ grain—of calomel may be placed on the tongue as often as every hour or half hour.

In some cases it becomes necessary to guard against diarrhœa, by the use of Dover's powder. Probably a systemic effect can be secured in this way quite as speedily as by inunction or subcutaneous injection. After a day or two of this frequent dosing, we may properly conclude that something of its constitutional effect has been secured. I would then suspend it for a time, or give it much less frequently.

In all instances where the croup is secondary to, or a concomitant of, other diseases, and in feeble children, I think it safer not to give mercury at all. Prof. J. Lewis Smith, in his most excellent work on children's diseases, advises a mixture of chlorate of potassium and muriate of ammonium for these cases, and gives us the following formula:

	Grammes.	
℞. Potassii Chlorate, . . .	4	ʒj.
Ammonii Muriat., . . .	2.6	℈ij.
Syrupi Simp., . . .	fl. 30	℥j.
Aquæ, ...	fl. 60	℥ij.

Misce.

℞. A teaspoonful or two every half hour or hour.

While you are attending assiduously to the details of medical treatment, you will give some thought to the nourishment of your patient. If, in any acute disorder, support is necessary, it is so here. Probably there is little or no appetite, but the fever creates thirst, which should be assuaged, in part, by milk. Beef-tea and other fluid foods may be given, if desired, but milk is of more value than any of these.

Then as to stimulants, I advise an early resort to them. The labored breathing, the restlessness, and the enforced wakefulness, are so rapidly exhaustive, that they may properly be given from first to last. Do not think that the violence of the laryngeo-tracheal inflammation contraindicates their use; on the contrary, it creates a demand for them. Some of the authors tell you that when the heart shows signs of failure, *then* resort to stimulants. But why wait for exhaustion? Why not try to prevent it? If stimulants are adequate to rally from a low condition, may they not, if given in time, forestall that condition? I believe it is proper to begin their use as soon as you feel certain that you have to deal with true croup. They may be given at first in small quantity and at infrequent intervals, but when the disease is at its height and the labor of breathing is great, you may use them with unsparing hand. The disease creates a tolerance of them. A child of from two to four years, may take daily anywhere from fifteen to ninety fluid grammes, or from one-half to three ounces, of brandy or whiskey with only benefit.

But statistics are heavily against us in this disease, and it is more than possible that, in spite of our efforts, the condition becomes increasingly unfavorable. It is apparent at length that, without the intervention of surgery, the child must die.

The question of a resort to tracheotomy then presents itself and must be promptly decided.

Tracheotomy does not cure croup; it simply admits air to the windpipe below the point of obstruction. With time thus gained, the laryngeal inflammation *may* subside and the patient recover.

The death-rate having been high, the operation has never been a popular one, but it should be remembered that the mortality has been in spite of the operation, not because of it. As it is never entered upon until death seems to be inevitable without it, and as its performance under ether or chloroform is painless, I think we might well resort to it more frequently than we do.

Reports from some public institutions are quite in its favor. Of ninety tracheotomies in the children's hospital at Prague, nearly thirty-five per cent. were followed by recovery. This is a better showing, however, than most other institutions make, and far more favorable than statistics from private practice.

Age has its bearing on the success of the operation. The older the child, the better is its chance, because, mainly, the trachea and larynx are more developed. Under two years of age failure is the rule, though, like many rules in medicine, subject to exceptions.

There is a proper time in the progress of the disease for operating. You will be in little danger of resorting to surgery while there are still hopes of success through medical means. There is more danger of procrastinating until the patient is moribund. This mistake has, I think, been sometimes made. As soon as lividity of the lips and finger-tips shows that the blood is becoming surcharged with carbonic acid, then, and not much later, is the time for tracheotomy.

The probabilities of recovery after the operation are much lessened if there is coexistent bronchitis or pneumonitis; and, unhappily, one or the other is often present. Not only that; these diseases are often consecutive to the tracheotomy, and, in case of death, are prime factors in its causation.

To prevent the occurrence of these pulmonary troubles after the operation, attention must be given to the temperature and humidity of the air to be inspired. Since it is no longer warmed by passing through the nose and mouth, it should be warmed artificially from 85° to 93° Fahr.

A competent nurse should be constantly at hand, by night as well as by day, to regulate the temperature, to give necessary attention to the tube, and to administer proper nourishment at proper times. The difficulty of obtaining such help at an hour's notice constitutes one reason why tracheotomy in private practice compares unfavorably with the same operation in public institutions.

As the steps of the operation are given in all surgical works, you will not expect me to enter on that part of the subject.

ORIGINAL ARTICLES.

PROLAPSE OF THE LARYNGEAL VENTRICLES, WITH ILLUSTRATIVE CASES.

BY JOHN N. MACKENZIE, M.D.,
OF BALTIMORE.

(*Read before the Clinical Society of Baltimore, March 17, 1882.*)

CASES of this rare lesion have been observed by Moxon,[1] Morell Mackenzie,[2] Lefferts,[3] Waldenburg,[4] Cohen,[5] and Elsberg.[6] Moxon discovered prolapse of one ventricle in the larynx of a man whose voice had never presented anything remarkable, and who had died in Guy's Hospital from carcinoma of the stomach. No mention is made of the general condition of the larynx in this case.

Mackenzie's patient was brought in a moribund state to the Hospital for Diseases of the Throat and Chest, and died before any notes could be taken of his condition. Complete eversion of the left ventricle, and partial protrusion of the right sacculus from the ventricular orifice, was found on *post-mortem* examination. The laryngeal membrane was covered with superficial ulcers, and the rewere cavities in both lungs.

Lefferts diagnosticated eversion of both ventricles in the larynx of a man who had previously suffered from a chronic catarrhal condition of the pharyngo-laryngeal tract. No cause could be assigned for the prolapse, which came on suddenly, and, probably, during sleep. After a preliminary thyrotomy, Dr. Lefferts excised both ventricles, and effected a cure of his patient.

Waldenburg refers briefly to a case which had been mistaken for a polypus by a brother-practitioner, and which retracted within the ventricular orifice under long-continued astringent applications.

In Cohen's case eversion of the right ventricle took place during an attack of bronchitis, aphonia, with slight stridor in inspiration, following a severe spell of coughing. Under the insufflation of sulphate of copper, partial replacement of the anterior half of the prolapsed structure took place.

Elsberg's patient had been more or less hoarse from infancy; ever since an attack of typhoid fever in his sixteenth year, in which he entirely lost his voice, he had been subject to catarrhal troubles of the respiratory tract. The voice gradually returned after convalescence from the fever, and since then he has had four separate attacks of aphonia, which came on without apparent cause, and subsided without special treatment. Both ventricles were found prolapsed, and the general laryngeal mucous membrane in a state of chronic inflammation. After preparatory local treatment with iodine, the tumor on the left side was removed with cutting forceps, and the right sacculus was painted subsequently with astringent solutions, under which it retracted gradually within the ventricular orifice.

[1] Trans. Path. Soc., Lond., vol. xix., p. 65.
[2] Growths in the Larynx, Lond., 1871, p. 34.
[3] Medical Record, June, 1876.
[4] Berliner klinische Wochenschrift, 1881, No. 15, S. 212.
[5] Archives of Laryngology, Jan., 1882, p. 66.
[6] Ibid., p. 67.

To these cases, which are the only ones which I can find recorded in medical literature, I now add the two following, and in so doing, it gives me great pleasure to acknowledge my indebtedness to Dr. Morell Mackenzie, of London, at whose clinic they applied to me for relief, for permission to publish them.

CASE I.—A shopman, æt. twenty-eight, applied to me July 28, 1879, at the Hospital for Diseases of the Throat and Chest. He stated that he had suffered for a long while from a catarrhal affection of the respiratory tract; that two years previous to his application at the hospital he had acquired syphilis, and for the past eighteen months had suffered, off and on, from sore throat and hoarseness; that six months before he consulted me, his voice had become quite suddenly gruff and hoarse, and had been growing gradually worse ever since. He could assign no cause for the change in his voice. When he first came to the clinic, he was completely aphonic; suffered from dyspnœa on exertion, pain in swallowing, and slight tenderness over the larynx. He also complained of an uneasy sensation of fulness in the throat, which compelled him to cough. These symptoms had been present for several weeks prior to his first attendance on the clinic.

A chronically thickened and congested nasal mucous membrane; a large, flabby, and pendent uvula; a congested and greatly relaxed post-nasal and pharyngeal mucous membrane; a chronic, catarrhal condition of the laryngo-tracheal membrane as far as the laryngoscopic view extended, testified to the correctness of the patient's affirmation that he had suffered from repeated catarrhs of the respiratory passages. The epiglottis, ary-epiglottic folds, and ventricular bands, were especially reddened and thickened, and the same could have been said of the left vocal cord. There was also some slight inflammatory œdema of the ary-epiglottic folds, and the mucous membrane covering the arytenoid cartilages. Projecting from the orifice of the right ventricle, which it fully occupied, was a tense, smooth, semi-elliptical tumor, clothed externally with mucous membrane of a deep red color, and covered with small, glistening points, resembling the mouths of minute follicles. The mass, which was partially covered by a very thin pellicle of mucus, extended from the extreme anterior limit of the ventricle backwards to within a short distance of its posterior extremity, and inwards beyond the free border of the vocal cord, which it covered almost completely, the vocal process and a portion of its anterior third alone being visible beneath. Its central portion bulged slightly towards the median line; both its extremities were rounded, the posterior being larger than the interior. The tumor was moderately tense in consistence, and after repeated trials with a suitably bent probe, could be made to recede, very slightly however, within the orifice of the ventricle. The upper surface of the mass, or, rather, the mucous membrane which covered it, was continuous with the ventricular band, and the edge of the latter seemed more rounded and less distinct in outline than in the normal condition. Quiet and forced respiration had no effect upon the tumor; and in phonation, beyond an apparent increase in tenseness, no change could be detected in the size or position of the mass. The cervical glands were enlarged, and there was an eruption (syphilitic) on the face, for which he was under treatment at the Skin Hospital in Leicester Square.

His larynx was painted with a solution of sulphate of copper, and strong stimulant inhalations were prescribed thrice daily. Under this treatment the inflammatory condition of the laryngeal membrane subsided in a marked degree, and in a few weeks the voice became purer and clearer in tone. The appearance of the tu-

mor, however, remained unaltered. Operative interference was proposed, but declined, and the tumor was accordingly painted daily with strong astringent solutions of various substances—copper, iron, zinc, silver, etc.—and he was directed to inhale the vapor of the iodate of zinc. By the beginning of the following November, a notable change had taken place in the appearance of the tumor; it had diminished greatly in size, so that the anterior third of the cord and its free border were visible; and the tense, solid, glistening body observed at first was replaced by a flabby, wrinkled fold of a pale red color, which closely resembled a portion of relaxed mucous membrane doubled upon itself. During the act of phonation the fold receded slightly within the orifice of the ventricle, and the cord passed from under it as it approached the median line. The fold diminished gradually in size; and the patient, finding his voice only slightly hoarse, and suffering no inconvenience from his throat, ceased his attendance on the clinic.

CASE II.—A sewing girl, æt. twenty-two, appeared September 22, 1879, at the hospital with the following history: She had been married eight years, and is the mother of one child, now seven years of age. Her family are consumptive. Her husband has had some venereal disease, and at the time of their marriage had an eruption on the face. During her confinement she had a rash on the chest similar to that with which her husband had been affected. She had always been subject to catarrhal affections of the nose and throat, and has often suffered from hoarseness, but never had any serious trouble with the respiratory organs. On the morning of the 27th of March, 1879, she awoke to find that her voice had become gruff and hoarse, and easily tired on exertion. For this sudden change in her voice she could assign no cause. The aphonia was accompanied by a sensation of a foreign body in the throat, and dyspnœa, especially at night, when she "would make strange noises in her sleep." These symptoms were succeeded by gradually increasing aphonia; the breath became offensive, and cough, with the expectoration of mucous pellets, was added to her suffering.

When she applied at the clinic there was slight fulness of the cervical glands; the clavicles, ribs, and xiphoid appendix of the sternum were tender on pressure, and she complained of intense frontal headache at night, which prevented sleep. Her womb was prolapsed, and she informed me that she had had an uterine discharge for a number of years.

The naso-pharyngeal membrane presented a chronically congested, thickened, and relaxed appearance; the entire laryngeal membrane was deeply hyperæmic and moderately swollen. Both ventricular bands were thickened—the right presented a nodular projection in its centre. The right cord was streaked with fine, red lines; the left almost entirely obscured by a large, pear-shaped, smooth, tense, and shining body of a rosy hue. It entirely filled the ventricle, from which it manifestly sprang; it terminated anteriorly in a more or less peaked extremity, and posteriorly in a rounded border, while its central portion bulged inwards towards the median line. Its upper aspect was slightly flattened; its inner convex and smooth. The tumor appeared to be covered with a thickened fold of mucous membrane, continuous with that covering the corresponding ventricular band. It was not affected by quiet and forced respiration, nor in phonation was there any remarkable change in its form or position. Repeated attempts were made with the probe to return the mass within the ventricular orifice, but without success.

Under topical application of strong astringent solutions the laryngitis subsided to a considerable extent by the end of October, but the dyspnœa persisted and she still complained of the sensation of obstruction in the throat. The fold of membrane which apparently enveloped the tumor grew paler and thinner, and became covered with shining points, and the tumor itself was less regular in outline than at first; but the diminution in bulk was very slight. At this time she was seen by Dr. Morell Mackenzie, who exhibited her at his clinic, and proposed an endolaryngeal operation for the removal of the mass. The patient, however, hearing that a surgical procedure was contemplated, never returned to the hospital.

The etiology of prolapse of the laryngeal ventricles is obscure, and the imperfect data which the scanty literature of the subject affords render it difficult to arrive at any definite conclusions as to its precise pathological significance. It is possible that it may be due to a variety of causes. A remarkable feature of most of the above cases is that the prolapse occurred in persons suffering from chronic catarrh and relaxation of the mucous membrane of the respiratory passages, and it is therefore not improbable that an important predisposing cause of the condition may reside in chronic inflammatory disease of the ventricles themselves. To render this more intelligible, it is necessary to bear in mind the anatomical disposition of the parts. The laryngeal ventricles, or so-called ventricles of Morgagni,[1] consist of two portions, a vertical and a horizontal. The vertical portion, or sacculus, extends upwards and backwards in a curvilinear direction between the ventricular band and thyroid cartilage to a distance varying in different individuals. It is bounded internally by the ventricular band, whilst its external support is derived mainly from the muscular fibres of the thyro-arytenoideus externus. Superiorly, beneath the fibres of the compressor sacculi, is a fibrous membrane investing the pouch and its glands, and, according to Hilton,[2] attached internally to the ventricular band, anteriorly to the edge of the epiglottis, and superiorly to the upper edge of the thyroid cartilage, thus forming an internal and superior support to the sac. This, which may be regarded as its suspensory ligament, constitutes its chief anatomical safeguard against prolapse. The sacculus is embedded in a mass of loose, distensible connective tissue, containing fat and glands, which separates it on the one side from the ary-epiglottic folds and on the other from the thyroid cartilage and median thyro-hyoid ligament. The horizontal is separated from the vertical portion of the ventricle by a transverse fold or frænum.

Inflammation predisposes to inversion by causing relaxation of the ventricular supports. If long-continued, it may lead to infiltration and fatty degeneration, and finally induce a paralytic state of the muscular walls of the sac; and it is not difficult to understand how such a condition may eventually lead to abrogation of the suspensory function of the internal superior fibrous ligament. In chronic inflammatory disease of the ventricle descent of the sac may be furthermore facilitated by hyperplasia of the areolar tissue, with which the sacculus is surrounded, which thus, acting as a *vis a tergo*, may push the walls of the sac downwards towards the cavity of the larynx. When the inferior segment of the pouch engages in the constricted portion which separates the two ventricular divisions, or, in other words, when inversion is complete, strangulation takes

[1] These should properly be called the *ventricles of Galen*, after the name of their discoverer.—(Galen-De Usis Part. Corp. Hum., i., 7, Cap. xiii.) They were also known to Curtius, Carolus Stephanus, Bauhinus, Casserius, Fabricius ab Aquapendente, Riolanus, and others of the older writers. To Morgagni belongs the credit of not only describing these structures with great accuracy in the human subject, but also of acknowledging the claim of Galen to priority.—("*Galenus has cavitates princeps invenit et ventriculos appelavit.*"—*Morgagni.*—Anat. Lugd. Batav., I., xvi. p. 19.)

[2] Guy's Hosp. Rep.

place, vascular dilatation supervenes, and the sacculus presents itself at the glottis as a protuberant mass, covered externally by its thickened, congested mucous membrane, and consisting internally of its connective tissue-bed in a state of inflammatory proliferation.

A sudden loss of voice, therefore, with more or less stridor in inspiration after violent expiratory efforts, or occurring without assignable cause in a person suffering from chronic catarrhal affections of the respiratory mucous membrane, would suggest the possibility of ventricular prolapse; but the diagnosis can only be made with the laryngoscope. Here it is liable to be confounded with fibrous polypus of the ventricle. If the case be seen before strangulation of the mass takes place, and when the sacculus presents itself at the glottis as a thickened fold, the diagnosis may be made by the rolling inwards in phonation, and its appearance within the ventricular orifice of the prolapsed sac, as described by Lefferts and Elsberg; or it may be returned within the orifice by a suitably bent probe. If, however, the dislocated ventricle has become strangulated and converted into a mass of inflammatory tissue, its differentiation from fibrous polypus may be aided by attention to its immobility, its attachment in its entire length to the ventricular band, the negative results of forced respiratory acts, its more or less pear-shape, with the long axis *parallel* with the ventricular band and vocal cord, and its smaller end in front. The retraction of the mass within the ventricular orifice under astringent applications strongly favors, if it does not absolutely confirm, its inflammatory nature; and if the mass be bilateral, polypus may be safely excluded. Practically, however, the diagnosis will have little influence in the treatment, and the rules which regulate the surgeon in the removal of laryngeal growths in general are equally applicable here. If the forceps be used, care should be taken lest the ventricle be torn too forcibly from its insertion. The case of the shopman detailed above, and those of Waldenburg, Cohen, and Elsberg, teach that retraction of the sacculus within the ventricular orifice may be sometimes secured by the persistent direct application of astringents.

METASTASIS IN PAROTITIS.

BY H. V. LOGAN, M.D.

(*Read by appointment before the Medical Club of Scranton, Pa., and published by request of the Club.*)

ON Friday, May 20, 1881, I was called to see G. A. J., male, æt. thirty-eight years, and, on inquiry, elicited the following statement: Patient was taken sick with parotitis about April 27, but continued to attend to his business (banking) until April 30, when he took cold, had a severe chill, and remained sick in bed until May 11. During his sickness he was severely prostrated, frequently fainting when attempting to sit up. The *left* parotid was inflamed, and at the same time the *right* testicle was involved. Patient had previously suffered with varicocele in right testicle. His left testicle was not involved in the metastasis. Returned to his business from May 14 to 19 inclusive. On May 19 felt lame and stiff, and that night was awakened about 11 P.M. with severe pain in left testicle, which remained all night. On the next morning he sent for me. On examination found left testicle swollen and very tender. The inguinal glands on left side were also inflamed. Ordered the application of a lotion, consisting of equal parts of tincture of opium and tincture of belladonna; also gave opiates to relieve the pain, which was severe. At the same time he was suffering from inflammatory rheumatism, which soon subsided under the salicylate of soda. As the soda seemed to affect his bowels, an astringent was prescribed.

On May 24, phlebitis of left femoral, popliteal, and about one-third of the anterior and posterior tibial veins set in. There was great œdema of the lower leg and foot, together with severe constitutional prostration. Called Dr. R. A. Squire in consultation, and we gave the following:

℞. Ferri (Quevennes), . . . ʒj.
Spt. vin. gal.,
Syr. simp., āā, ... ʒij. M.
Sig. Teaspoonful every four hours.

For the enteric disturbance we gave—

℞. Pulv. aromat., ... ʒiij.
Tr. catechu, ... ʒiv.
Tr. cardam.,
Tr. opii, āā, ... ʒij.
Mist. cretæ.,
Syr. simp., āā, ... ʒiss. M.
Sig. Teaspoonful every two to four hours.

For the phlebitis, we used a lotion of the following:

℞. Tr. Opii, ... ʒij.
Liq. plumbi subacet. dil., q. s. ad. Oij.

We heated the lotion, swathed the limb with hot flannel dipped in the lotion, then covered it with oiled silk, next a thick layer of cotton batting, and bandaged the whole with a flannel roller. This dressing we would leave undisturbed for twelve hours. This hot pack seemed to exert a happy effect upon the inflamed vessels, and in about fourteen days the inflammation began to subside.

On June 1 typhoid symptoms appeared, with violent vomiting, diarrhœa, and tympanites. Gave the following:

℞. Bismuthi subnit., . . . ʒiij.
Opii pulv., ... gr. viij.
Plumb. acet., ... ℈j.
Syr. simp., ... ʒij. M.
Sig. Teaspoonful as needed for the gastric disturbance.

For the typhoid trouble we gave—

℞. Spt. terebinth., . . . gtt. c.
Pulv. acaciæ,
Sacch. alb., āā, . . . ʒj.
Aq., ... ʒij. M.
Sig. Teaspoonful every four hours.

His bowels were so sore that we had to relieve them with injections, and for the same reason were compelled to catheterize him every time he wished to urinate.

17th.—Collateral circulation was pretty well established, and œdema of the limb began to disap-

pear. The typhoid symptoms also began to subside.

21st.—Pleurodynia set in, and in his excessive weakness interfered materially with his respiration. For this I gave him ammonii chlor., ʒss., every six hours, in divided doses, which seemed to exert a good influence.

July 2.—Violent diarrhœa and vomiting set in, with severe prostration. His food was not assimilated, but passed through him little changed. Again returned to the bismuth and opium mixture. Also, gave him nutrient enemata, and tannic acid and opium suppositories.

6th.—Inflammation of left parotid gland set in. This soon extended through the external jugular, the subclavian, the axillary, the basilic, and part of the anterior and posterior ulnar veins. There was severe œdema of the lower arm, together with great pain, extending from the head, through the left side of the neck, and down the left arm. Was compelled to again resort to opiates, on account of the severity of the pain. The gland became so swollen as to draw down the whole left side of the face, including the outer side of the eyelids and the left side of the mouth, giving the left side of the face the appearance of having slid down the neck part way. For the gland, I first tried the application of cold, but, although the weather was intensely hot, yet the cold seemed to be disagreeable to him. Next I tried heat applied by means of small soft bags filled with parched flour. These bags, being loosely stuffed, adjusted themselves nicely to the swollen gland, and retained their heat a long time. The nurse changed them before they lost many degrees of heat, so that for four days I kept up a constant heat, day and night. I may state that in this case the heat was not only well borne, but was very agreeable to the patient. For the phlebitis, I used the same dressing as in the case of the leg, with the same good result. The inflammation of the gland and the phlebitis subsided at the same time, which began about ten days after its commencement. With the hope that I might reach the trouble constitutionally, as well as locally, I gave the following:

℞. Fld. ext. cimcifugæ, . . . ʒj.
Potass. iod., ... gr.xv.
Syr. simp., ... ʒj. M.
Sig. Teaspoonful every five hours.

After giving this about five days, I was obliged to desist, on account of the disorder of his digestive organs.

21st.—Phlebitis of right femoral, popliteal, and part of the anterior and posterior tibial veins set in. As in the case of the left leg, I was unable to say whether the external iliac was involved or not, but the femoral vein was inflamed clear up to Poupart's ligament, and the inflammation in the case of the left limb extended to the superficial circumflex iliac, the superficial external pudic, and the superficial epigastric. My treatment in this case was the same as in the phlebitis of the arm and the other leg, and was just as satisfactory. I will state that the inflammation in this leg was not nearly as severe as in the other limbs, although the result was the same, namely, the occlusion of the vessels and œdema of the limb.

29th.—Collateral circulation was established, the œdema began to disappear, and the patient began to recover. As soon as the patient was able to endure the journey, I ordered him to the seashore. Unfortunately, while passing through New York City, he consulted a physician, who advised him to use his limbs in walking, stating that the feeling in his limbs would tell him when he ought to rest. He did so, when almost immediately the phlebitis reappeared, œdema set in, and he was again laid up for three weeks. Under the same treatment originally used, the phlebitis and its results again disappeared, and he is now doing well in every way. I find that there is a slight circulation through the affected venous channels of the right leg, but can find none through those of either the left leg or arm, and from present appearances do not think that the injured veins of the left leg and arm will ever be of any use to him. Still, the collateral circulation of both seems to be sufficient, and both limbs seem to be well nourished.

[*Note.*—During the discussion which followed the report of this case, Dr. J. L. Rea stated that in three cases where metastasis had occurred, he had succeeded in causing a return of the peculiar morbid process from the testicle to the parotid gland (return metastasis) by poulticing the parotid.]

HOSPITAL NOTES.

PENNSYLVANIA HOSPITAL—EYE AND EAR DEPARTMENT.

(Service of DR. GEORGE C. HARLAN.)

THREE CASES OF MASTOID DISEASE, TREATED BY TREPHINING.

(Reported by DR. CHARLES H. MCILWAINE.)

CASE I.—M. B., a school girl, eight years of age, well developed, and previously in excellent health, had sore throat about a month ago, followed by pain in the right ear and slight discharge.

Dec. 27.—There is now very free purulent discharge and severe pain, particularly at night. There is a large perforation in the anterior and lower quadrant of the membrana tympani, and slight redness, swelling, and tenderness over the mastoid. Ordered warm poultices, to be renewed four times a day, and the ear to be douched twice a day with a solution of boracic acid ʒj to pint of warm water. Liq. morph. sulph. to be administered in ʒj doses.

29th.—Violent pain last night, and no sleep, even with morphia. The child cries almost constantly, and is restless and feverish, and without appetite. The mastoid swelling has greatly increased, displacing the auricle outwards and forwards, but there is no fluctuation. There is violent headache, and the whole side of the head is tender to the touch. The discharge continues; a free incision was made down to the bone through the tissues over the mastoid, which cut like cartilage, and about a thimbleful of pus escaped. The bone was bare and rough, but not perforated, and not soft enough to be penetrated by a steel director. Buck's drill was used, and a small opening was made through which a probe passed into the horizontal mastoid cell. A small quantity of pus was discharged. As the inten-

tion at first was merely to make the Wilde incision, the operation was done without ether.

30th.—Patient passed a comfortable night and has had no pain, is up and going about the ward. There is slight discharge from wound, but none from ear.

Jan. 7.—Has had no discharge from ear since operation; still some discharge from wound and from opening in bone.

19th.—Wound entirely closed; no discharge from ear, and no perforation can now be detected.

Feb. 11.—Membrane nearly normal in appearance; slight opacity. Hearing, $\frac{3}{15}$.

CASE II.—Hannah B., age eleven, was brought to the hospital June 24, when the following note was made: She has had discharge from both ears for about a year. The right membrane is opaque and retracted, and has two perforations, one above the short process of the malleus and one in the posterior lower quadrant. But little remains of the left membrane. There is a profuse and offensive discharge from both ears. The Eustachian tubes are not pervious. The mucous membrane of the pharynx is thickened, and the tonsils are enlarged. Her general health is poor. A 40-grain solution of nitrate of silver was applied to the left ear on a small pledget of cotton, and 20 grains to the throat. ℥j. of alum in a pint of warm water was ordered as a douche twice daily. Cod-liver oil and syrup. ferri iodidi were prescribed.

Aug. 10.—Discharge from the right ear very much lessened.

Oct. 26.—Boracic acid ℥j. to Oj. of warm water, as a douche, twice daily, was substituted for the alum, and a 20-grain solution of nitrate of silver was applied to both ears.

Nov. 23.—A small polypus was removed from the left ear, and a saturated solution of nitrate of silver was applied to its base.

April 7.—Has had only occasional discharge from ears, and consequently did not report at the hospital since last note. Four days ago the left ear began to be very painful; there is now intense pain, slight discharge, and considerable swelling of mastoid region and meatus; drum not seen distinctly; no polypus. Leeches were applied to the mastoid, followed by a poultice, and the hot-water douche was used every two hours. Morphia gr. $\frac{1}{16}$, p. r. n.

13th.—Free discharge from ear. Pain severe. Mastoid more swollen.

14th.—Ether was administered, and a free incision was made over the mastoid, giving exit to a large quantity of pus. The bone was found bared and rough over a space the size of a twenty-five cent piece. A small perforation was discovered, through which a probe passed inwards and forwards to the horizontal cell, and the opening was enlarged by boring with a director. A carbolized tent was introduced into the wound, and a poultice of flaxseed applied.

23d.—The nozzle of Anel's syringe was introduced into the opening in the bone, and a solution of salt and chloride of zinc injected, coming out through external meatus.

May 14.—No discharge from ear since the operation. External wound entirely healed. Malleus bared and out of place. Ceased to attend.

CASE III.—Gustav Engel, æt. six, just arrived from Denmark, came under treatment May 5. No history can be obtained, except that the patient has had measles, followed by an acute attack of pain in ear and purulent discharge. The posterior part of the right membrane is bulging and there is a small pinhole perforation. The mastoid region is swollen. The opening in the membrane was enlarged by paracentesis.

May 17.—Swelling over mastoid increasing. Ordered poultice continuously.

19th.—The swelling over the mastoid has markedly increased, and the pain is so violent that the patient cannot be quieted even with large doses of morphia. Yesterday he received a severe blow on the side of his head, knocking him down, which was followed by pain and swelling of the whole side of face. Examination showed membrane bulging again in the old place.

The patient was etherized and a free incision was made over mastoid, giving exit to one-half ounce of thick pus. The bone at upper part of mastoid was bare and rough over a space the size of a five-cent piece, which was softened but not perforated. The bone was bored through with a steel director at this point, making an opening free enough to admit a probe three-quarters of an inch in the direction of mastoid antrum. A carbolized tent was introduced into the wound and a poultice applied.

20th.—The patient has been entirely relieved of pain, he slept well last night, and this morning it is impossible to keep him in bed.

25th.—A solution of 2½ grains of chloride of zinc in an ounce of warm salt water, has been daily syringed through the mastoid cells and drum, passing out by the external meatus.

30th.—There is no discharge from ear and only slight discharge from wound, which has been kept open by the carbolized tent.

June 5.—External wound entirely healed; has had no pain nor discharge from ear since operation. Was removed from hospital and did not return.

Remarks.—The symptoms in all of these cases were alarming, and there seemed little prospect of their doing well under an expectant or temporizing treatment. The ear disease had, in fact, become a secondary consideration in the presence of the more serious danger of extension of the disease to the brain, through caries of the deeper parts of the bone or escape inwards of the pent-up pus. Giving free external exit to the discharge was merely carrying out one of the best-established principles of surgery. The relief was immediate and permanent, and the subsequent progress of the case was uninterrupted.

MEDICAL PROGRESS.

POISONING BY BORACIC ACID.—Two cases of poisoning from the surgical use of boracic acid are reported from Russia by MOLODENKOW, of Moscow. A five-per-cent. solution of boracic acid was used to wash out the pleural cavity of a patient twenty-five years of age, the operation lasting an hour, and thirty pounds of the solution being employed (!). Nausea and vomiting followed, the pulse became frequent, and the patient prostrate. On the following evening erythema appeared on the face, and spread, on the third day, to the neck, chest, and abdomen. On the fourth day the erythema had extended to the thighs, and small vesicles appeared on the face and in the throat; sight became dim, and the patient died, consciousness being preserved to the last. The second patient was sixteen years of age, and suffered from a lumbar abscess, which was opened and washed out with the same solution and for the same length of time. The operation was followed by symptoms precisely similar to those observed in the first case, and the patient died on the third day. In each case, it may be further noted, there were transient elevation of temperature, hiccough, skin eruption, and death with the indications of cardiac paralysis.—*Lancet*, May 6, 1882.

TREATMENT OF EXTRA-UTERINE PREGNANCY.—HUGO CLAU (*Thèse*, Berlin, 1881) says: One of the first indications when extra-uterine pregnancy is diagnosed is

to destroy the fœtus. To accomplish this result it was proposed to act on the maternal organisms. That uncertain and dangerous method was soon abandoned. Aiem proposed to destroy the fœtus by introducing a trocar through the abdominal wall.

Basedow first proposed to puncture the ovum through the vagina. This last method gave good results in the hands of Kiwish.

To destroy the fœtus we may—

1. Puncture the ovum by means of a trocar introduced through the abdominal wall or *per vaginam*, and let out the amniotic fluid surrounding the product of conception.

2. Puncture the fœtus itself, and kill it in that manner.

3. Inject the fœtus with morphia and thus destroy it.

4. Destroy it by electro-puncture.

Laparotomy must be performed if indicated.

SACHS (*Thèse*, Berlin, 1881) says, regarding this: According to the old authorities, laparotomy is always indicated when the fœtus still lives. If dead, it should not be performed. This doctrine is still adhered to by many authors. In the preceding article several methods are proposed with the objects of destroying the fœtus and arresting further development of the pregnancy.

In a certain number of cases the cyst containing the fœtus does not break, but the contents cease to live, and not only is there no augmentation of volume, but it really shrinks more and more; finally, fatty degeneration attacking the fœtus itself, a compact mass is found in which it is extremely difficult to recognize a fœtus. This is one method of recovery from extra-uterine pregnancy.

But when extra-uterine pregnancy with living fœtus is diagnosed, should the child be destroyed, or laparotomy be performed? At first thought one would actually select the first, as being more easily performed, and at the same time less dangerous.

If the infant is dead, it seems best not to interfere. But several authors have reported cases in which, abscesses having been formed about the fœtus, the mother died. Keller seems to have been the first (1872) to perform laparotomy for lithopædëon. After that, memoirs on the subject were published by Parvy, Litzman, Dechamps, etc., in which it is shown that lithopædëon constitutes a permanent danger for the mother. Hence laparotomy is indicated in this case. A general summary would seem to show that laparotomy is always indicated in extra-uterine pregnancy.—*North Carolina Med. Journ.*, April, 1882.

ENCYSTED BULLET REMAINING TWO YEARS IN THE BASE OF THE SKULL.—At the meeting of the Cincinnati Academy of Medicine held April 10, DR. SCHWAGMEYER related the following interesting case. A girl about nine or ten years of age was shot accidentally by a little boy two years ago next June. The ball entered the head just above the eye, penetrated both tables of the skull, causing an effusion of blood in the orbit, so that the eye protruded. It was thought that the child would die. Dr. Ayres was called in consultation by Dr. Fishburn (who also attended the child) and himself, but they all agreed that nothing could be done, and the child was treated as symptoms arose. Contrary to expectation, the swelling in the eye retracted, sight became normal and the child got well in six weeks. The only remnant of the injury was a small ulcer in the inner margin of the eye. This healed occasionally, and then the child would complain of headache, which would disappear again when the ulcer reopened. There was a small sinus near the lid, but it was not probed. There seemed to be connection with it and the tract of the wound. She was sent to the country, where she spent the summer, and also last winter. Six weeks ago she complained of pain in the back and occasional slight headache, but continued to play every day on the street. Last Monday night convulsions set in, with all the symptoms of acute meningitis, from which she died. A post-mortem examination showed the brain highly congested, the arteries being almost black and the surface studded with minute abscesses. There was no fracture of the orbit. The brain was examined diligently for the bullet at the base, but this was nowhere to be found. Hope of finding it was almost given up, when a minute spot was detected in the sphenoid bone, below the middle lobe of the brain, near the sella turcica. This portion of the bone seemed to be elevated, and it was only by close examination that the bullet was discovered. It was then carefully chiselled out of the osseous structure in which it had been completely encapsuled.

The speaker could hardly believe that the child died of the injury, because the bullet was entirely closed in, and there was no tract of inflammation from the seat of injury to other parts of the brain. As the mother died of consumption, and the child was always sickly, the speaker suspected tubercular meningitis, and hardly regarded the gun-shot injury as the cause of death, but looked upon it as entirely independent of the meningitis. The child was said to have run its head accidentally against a wagon about one week ago; he did not know whether that could in any way account for the death of the patient.—*Cincinnati Lancet and Clinic*, April 29, 1882.

PHTHISIS IN DIABETIC SUBJECTS.—In an interesting work by Leyden on this subject, published in the *Zeit. f. klin. Med.*, Bd. IV., the following are especially deserving of notice.

Phthisis generally develops in diabetics with but slight general disturbances. The patients cough very little or not at all, and the fever is slightly marked or may be entirely absent; hæmoptysis rarely occurs, and Leyden has never seen a profuse pulmonary hæmorrhage. (Rohden-Lippspringe, however, reports a case of diabetes in a man who died suddenly from pulmonary hæmorrhage.) The progress of the disease is extremely rapid. Leyden was able to obtain post-mortem examinations of seven cases of diabetes complicated with phthisis of different grades of severity. The anatomical peculiarities were of three kinds: 1. There was an entire absence of miliary tubercle. 2. Giant cells were rarely found, from which it may be concluded that diabetic phthisis is more of a local than infective affection. 3. Extensive arteritis causing obliteration of the arteries, and reaching from comparatively large branches to the finest twigs on the pulmonary alveoli.—*Deutsche Med. Wochen.*, April 1, 1882.

DISLOCATION OF THE BONES OF THE CRANIUM AS A CONSEQUENCE OF ACUTE MENINGITIS.—This lesion has not been as yet noticed by authors who write on infant pathology, although, according to PARROT (*Revue de Med.*, Feb. 1881), it is by no means rare.

He gives three cases in which this lesion existed, and which was only discovered *post mortem* after the calvarium had been stripped of the soft parts which covered it. It consists of a dislocation of the cranial bones, with an effusion between the borders of a sanguinolent fluid. The separation is greatest at the coronal and sagittal sutures, near the bregma, where the separation may be from three to four millimetres. It shows well on the dried skull.

This dislocation appears because the contents of the skull become suddenly too great for its size, and the force from within overcomes the force which holds the bones together.

As to the cause of the expansile force, we can find

it in the enlarged volume of the encephalic mass, and in the development of the cephalo-meningeal lesions. Age plays an important rôle in the production of this lesion. All the cases mentioned by Parrot were neither newly born nor were they adult. They belonged to that period of life when we find no membrane between the bones, and where, on the other hand, the sutures had not acquired the solidity they possess later.

Can cranial dislocation be diagnosticated during life by any particular symptoms? As to that our author can not state positively, nor does he feel justified in offering an opinion.—*Cincinnati Lancet and Clinic*, April 29, 1882.

CASE OF CHRONIC CYSTITIS; CYSTOTOMY; RECOVERY.—MR. HAMILTON, House-surgeon to the Northern Hospital, Liverpool, reports the following case: A sailor, aged twenty-seven, was admitted on January 15, 1881. The illness dated from two months before admission, when, seven weeks after recovery from a swollen testicle from injury, he was much exposed during a stormy voyage to cold and wet. He found himself unable to retain urine, which constantly dribbled away from him, or was passed with straining and pain.

On admission, he had severe pain at the end of the penis, both before and after making water; marked incontinence of urine, with frequent painful attempts at micturition. There was congestion of the glans penis and prepuce, but no stricture of the urethra, nor stone in the bladder, into which the passage of a sound gave great pain. The urine was thick, ropy, fetid, and contained pus in considerable quantity. His bed and clothes exhaled a strong mousy, urinous odor.

During his stay in hospital, all the usual methods of treatment were diligently employed, but without effect. Such internal remedies as buchu, uva ursi, benzoic acid, copaiba, solution of potash and henbane, belladonna, etc., and locally washing of the bladder with bismuth and morphia, quinine, dilute nitric acid, and suppositories of morphia and belladonna. Relief to the pain was given by hypodermic injections of morphia, but the disease went on from bad to worse. Continuous draining of the bladder by catheter and tubing was attempted, but, adding fearfully to the agony, had to be discontinued after a few hours. Under these circumstances, and especially as the general health was now much affected, cystotomy was determined upon.

On June 30, 1881, under ether, the patient being in the lithotomy position, the ordinary lateral operation as for lithotomy was performed; the finger was passed into the bladder, and it was thoroughly explored. The cystic mucous membrane felt soft and velvety, and no ulcerated or gangrenous portions could be discovered. A drainage-tube was then passed into the bladder; a suppository of one grain of morphia into the rectum, and he was placed in bed. His progress was most satisfactory; and, though weak, he was able to be out of bed in six weeks. At the end of two months he began to void urine per urethram, with only occasional attacks of cystic pain; still it was considered advisable to enlarge the wound so as still to ensure complete drainage. In October the sinus was allowed to close, being occasionally cauterized to assist this process. He now went to the Walton Convalescent Home, but had to be again admitted, as the sinus still allowed a few drops to pass; this was remedied by excision of the sinus and deep stitching.—*Lancet*, April 29, 1882.

URÆMIA.—In a case of scarlatinal nephritis, with uræmic convulsions, Dr. D'Espine, of Geneva, employed copious venesection with most satisfactory results, and he caused a chemical analysis of the blood to be made. The facts ascertained are of considerable interest. The urea was found to amount to the enormous proportion of 3.3 parts per thousand of blood and 6.5 per thousand of serum. This is about twelve times the normal quantity, and twice as much as was present in a case of uræmia examined by Picard (1.5 of urea in 1000 of blood). Of course this does not prove urea to be the cause of the symptoms. Würtz and Chalvet failed to find any increase of urea in the blood, an observation which is of more significance than the innocuity of injections of urea (ascertained by Feltz and Ritter), since the latter may be explained by the rapidity of elimination. The last-named observers, it may be remembered, ascribed the symptoms to the excess of potash salts, and in the case of D'Espine these also were increased to about three times the normal quantity. Moreover, two-thirds of this were contained in the serum, the normal relation being thus inverted, since almost all the potash in normal blood was contained in the globules. D'Espine is inclined therefore to regard as the explanation of uræmia—(1) An accumulation of potash in the serum, derived from the uneliminated detritus of red corpuscles, the destruction of which may be facilitated by the accumulation of urea in the blood. (2) To an enormous increase of the arterial tension in consequence of the direct action of the dissolved potash salts on the endocardium and on the nerves of the heart. The venesection acted probably in a complex manner, by eliminating some of the toxic agent, and by suddenly lowering the arterial tension.—*Lancet*, May 6, 1882.

TREATMENT OF ACUTE DYSENTERY WITH ACONITE.—DR. WM. OWEN reports one hundred and fifty-one cases of acute dysentery occurring in the Convict Hospital, Port Blair, India, which were treated with tincture of aconite; all the cases were typical examples of acute dysentery and all, with one exception, recovered. He states that he was led to give aconite a trial, as the remedy most likely to be successful, from the following considerations:

(1.) From its beneficial action in other acute inflammations.

(2.) From its effects on the capillaries of the skin, which it dilates, thus relieving internal congestion.

(3.) From its antipyretic action in febrile cases.

(4.) From its sedative action on the mucous membrane of the stomach and intestines, and its beneficial action in some forms of dyspepsia. In the first case in which he tried this remedy he was somewhat diffident, and he had ten cases in which a combined treatment of ipecac and aconite was used. However he soon discontinued the ipecac entirely, finding there was no occasion for its use.

Dr. Owen gives one minim every quarter of an hour for the first two hours, and a minim every subsequent hour, or thirty minims in twenty-four hours; this method he finds to be followed by the best results, inasmuch as the action of the medicine is more rapidly established, and an effect on the disease was more quickly produced than by the other methods.—*Indian Med. Gaz.*, April 1, 1882.

AFFECTION OF THE HEART IN DIPHTHERIA.—With the exception of the diphtheritic endocarditis described by Bouchut (to a large extent, if not altogether, a product of the scientific imagination), the chief alterations found in the heart after diphtheria affect the muscular substance. Granular degeneration of the fibres has been especially conspicuous in cases of death with the symptoms which it is customary to refer to cardiac paralysis, although the precise significance to be attached to this degeneration has been hitherto a matter of considerable doubt. A series of cases of this character has lately been very carefully studied by Leyden

of Berlin. In all, the alterations in the muscular substance were so marked, and of such a character, as to justify the opinion that they were really inflammatory. Multiplication of the intermuscular nuclei, and the occurrence of degenerated foci, the result of the atrophy of these nuclei, constitute its special characters, these alterations being usually accompanied by the fatty degeneration of the muscular fibres themselves. But the two changes do not correspond in degree, or even in distribution. To this affection must be ascribed the extravasations in the substance of the heart occasionally noted, its soft consistence, and the dilatation which it undergoes. Leyden conjectures, indeed, that the cardiac failure, usually regarded as paralytic in nature, may be in reality the effect of these muscular changes. Their relation to the process of the general disease is a question of much interest, on which, unfortunately, Leyden has little light to throw. He has failed to find micrococci in the altered tissue, but as he has also failed to find them in the kidney (in which their occurrence has been lately demonstrated), it seems still possible that bacteria may underlie the cardiac as well as the nephritic changes. The former resemble closely those which occur after typhus fever and some other acute specific diseases. A very important practical question is the character of the symptoms which are produced by the change, and by which its presence can be recognized during life. They may occur during the height of the disease or during convalescence, and it is particularly during the latter that their detection is so important, since they indicate a grave danger, which may, to some extent, be met by treatment. The symptoms are chiefly those of cardiac weakness, but to certain of them Leyden attaches especial significance. One of these is the gallop-rhythm of the heart sounds, which he regards as one of the surest indications of dilatation of the left ventricle, with irregular tremulous contractions. Vomiting is another frequent symptom, and always, from this cause, indicative of imminent danger. It is not a direct symptom, but is probably due to an irradiation of the disturbance to other parts of the pneumogastric nerve. The tendency to this cardiac failure constitutes a serious objection to the use of depressant remedies, such as salicylate of soda, especially to pilocarpin, and to the repeated use of any emetic.—*Lancet*, May 6, 1882.

FRACTURED RIB FROM MUSCULAR ACTION.—M. DESPRES relates (*Gaz. des Hôp.*, Feb. 28) one of these rare cases in a lady, fifty-three years of age, and in good health, except for a temporary attack of chronic bronchitis, with a paroxysmal cough. During a fit of coughing, she fractured the eleventh rib of the left side, four fingers' breadth from the junction with its cartilage. Malgaigne's diachylon plaster was applied, and in eighteen days consolidation was quite complete, so that the patient could lie easily on the injured side. [In the *Union Médicale* of April 29, M. Doit, of the Vincennes Convalescent Asylum, relates the case of a tailor, fifty-nine years of age, who, while about to sew, was seized with cough, during which his sixth rib on the left side was broken at its anterior third. There was much greater mobility of the fragments in this case, and reparation was much slower than in the other.]—*Med. Times and Gaz.*, May 6, 1882.

HOT BATHS IN THE TREATMENT OF APPARENT DEATH IN THE NEWLY-BORN.—DR. GOYARD read a note before the Académie des Sciences, on February 27, in which he detailed the account of the case of an infant apparently stillborn, and in whom frictions, artificial respiration, etc., had been fruitlessly tried, who was restored to life after fifteen seconds' immersion in a bath at 45° C. He also reported the case of an infant aged fifteen days, who, after gradually sinking, passed into a condition of apparent death, the body being cyanosed and the heart beats imperceptible to auscultation. When placed in the hot bath the infant recovered in a few seconds, and the same condition occurring again on the next day, it was again restored by the same procedure. Dr. Goyard says that if the baths are not instantly efficacious, there is no use in persisting in their use.—*Revue Intern. des Sci. Biol.*, April 15, 1882.

DIABETES INSIPIDUS TREATED WITH ERGOT.—DR. JOHN MACAULAY and MR. SAMUEL MACAULAY report the following case: Mr. W. A. C., aged forty, came under our care in the beginning of December last, complaining of headache and disordered digestion, which were abundantly demonstrated by the appearance of his tongue, as it was covered with a creamy fur. He stated that for a short period prior to consulting us he had suffered from inordinate thirst and urination. His pulse was rather rapid the first time we saw him, but it was afterwards quiet. His family history was excellent, and he himself had enjoyed good health until about two years ago, when he suffered from an acute attack of Bright's disease.

On examination his urine was found to be pale, of acid reaction, specific gravity 1002, and containing traces of albumen, but no sugar. He was ordered stomachic medicines at first, which had the effect of improving the condition of his digestive organs; then he was placed upon iron and quinine for some three weeks, but with no amendment of the diabetic symptoms. As he was passing enormous quantities of urine —generally from eight to ten quarts per diem—and was consequently losing flesh, we determined to try the effects of ergot, which remedy has been so successful in the hands of Dr. J. M. Da Costa, of Philadelphia, in the treatment of diabetes insipidus. Accordingly he was prescribed drachm doses of the liquid extract of ergot three times a day, on January 3. There was no change observed in his condition until the 7th of the same month, when slight diminution of thirst and diuresis took place, and, at the same time, the slight pain which he had complained of in his head now became so very severe that it was necessary to discontinue the administration of the ergot. In the course of a day or two the pain in his head had considerably abated, but the thirst and urination again increased. The ergot treatment was resumed on the 12th of January, in similar doses, and on the 23d the intense thirst and excessive urination suddenly gave way to the normal condition of things in these respects; but again at this time he complained of the most excruciating pain in his head, which was relieved by withdrawing the ergot and giving a hypodermic injection of morphia. Since then there has been no return of the urgent thirst and diuresis; but the pain in the head is subject to periodic exacerbations and remissions, and is neuralgic in its character. We have no doubt that it will be at least temporarily relieved.

Remarks.—The above, although an undoubted case of diabetes insipidus, was complicated with Bright's disease, and this fact rendered the result of the exhibition of ergot a matter of considerable doubt, but the satisfactory effect produced has fully justified the experiment. There was no slowing of either the pulse or breathing produced in this case by the administration of ergot. There can be no doubt, from the results in the cases of diabetes insipidus which have been recentiy treated with ergot, that it is a remedy which has a powerful control over this most obstinate disease; and, if it can be proved to be an unfailing remedy for it in the future, then one more ailment will have been rescued from the category of "hopeless" diseases.—*Lancet*, April 29, 1882.

THE MEDICAL NEWS.

A WEEKLY JOURNAL

OF MEDICAL SCIENCE.

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SATURDAY, MAY 27, 1882.

PARTIAL RESECTION OF THE BODY OF A VERTEBRA.

DR. JAMES ISRAEL, of the Jewish Hospital, in Berlin, gives an extremely interesting account of this novel operation in the *Berliner klinische Wochenschrift* for March 6, 1882.

Resections of the spinous processes, or of the posterior arches of the vertebræ, are not very rare. A very complete and excellent discussion of the subject is given by Dr. Otis in the *Medical and Surgical History of the War of the Rebellion.* Even the casualties of such a gigantic war furnish nothing in the way of designed and purposeful operations on the body of a vertebra, beyond the mere removal of necrosed fragments.

Hence this case is of very unusual interest. It was that of a man of thirty-four, who had been scoliotic for twenty-seven years to such a degree that his trunk was shortened to one-half of its normal height. A gradually progressive paresis of the legs had deepened into complete paraplegia of six weeks' standing when Israel first saw him. The legs were wasted, motionless, with increased reflexes, but without contractures; the reaction to the induced current was diminished; sensibility was scarcely disturbed; the bladder and bowels were normal. The spinal curve in the dorsal region was to the right, and to the left in the lumbar. To the left of the first lumbar spine was a cold abscess as large as an apple, and upon pressure it seemed that its contents were forced into a prolongation of the abscess-cavity, towards the convexity of the right lower ribs.

The symptoms pointed clearly to some cause of circumscribed pressure on the motor portion of the cord. To what was this due? Evidently the lateral curvature could not be held responsible, for it had existed for twenty-seven years, and the paralysis was of but a few weeks' standing. There was no posterior curvature perceptible which could compress the cord. The abscess, and the pain on pressure, whether on the dorso-lumbar spine or on the twelfth rib, and the gradually produced paraplegia, convinced him that there was caries of the body of the vertebra, which had caused the abscess, and this, without any kyphosis, had produced the paraplegia by its localized pressure on the anterior part of the cord.

The tenderness on pressure on the right twelfth rib showed that the caries was probably on that side of the body of the last dorsal vertebra, and he determined to operate by resecting the posterior portion of this rib, which would give access to the focus of disease in the vertebra, all the more readily, of course, on account of the rotation of this vertebra strongly to the right. He first opened the abscess, next the sinus leading to the twelfth rib at its point of greatest convexity, whence it led directly inwards to the predicted spot. The rib was bare of periosteum, and carious. Resecting this, access was readily had to the vertebra, which had undergone cheesy metamorphosis and was already partly destroyed. By the sharp spoon the body of the vertebra was removed down to the canal. The moment this was opened, thick pus welled up from the canal, justifying his admirably logical diagnosis. Half of the body of the vertebra, and part of the right half of the arch, were removed, opening the canal to a large extent, and disclosing the cord forced to the left side, flattened, and of a green-gray color. Slight touch caused motion of both great toes. The operation was done antiseptically, and was followed by no reaction; indeed, the previous hectic fever subsided. The incision healed excellently, and was reduced to a very small linear wound, when, in the fifth week, his cough increased, and on the thirty-seventh day after the operation he died. The condition of the legs, the bladder, and the bowels remained unaltered to the end.

The autopsy showed right-sided pleurisy, originating from the carious twelfth rib, with a dry focus of carious degeneration in the lower lobe, surrounded by miliary tubercles.

Though the case terminated fatally, the autopsy showed clearly that it was in no wise due to the operation, but, on the contrary, that a much earlier operation would have given the patient a far better chance for life. If we may judge, at least from military surgery, which, so far, has afforded us our chief lessons in this respect, the uncovering of the spinal cord in a healthy subject is fraught with danger; but its exposure in cases of disease would seem to be far less dangerous, especially if the operation relieves the cord of any serious source of evil, as in the present case. That no febrile reaction

occurred, but that the fever was lessened; that the antiseptic spray produced no ill result on the cord (we presume it was used, though it is not specifically named), and that no ill effects followed the necessary mechanical disturbance of the cord as to its ordinary conditions of pressure, support, occlusion from the air, etc., are all circumstances worthy of notice. The paralysis, it is true, was not bettered, but this is not surprising in view of the late date of the operation, and we are justified in the hope of far better results in any future operations. Experience will teach us much. All operations undergo a process of evolution by natural selection and the survival of the fittest.

NERVE-STRETCHING FOR SCIATICA.

NERVE-STRETCHING by forced flexion of the thigh on the abdomen, under chloroform, as proposed by Billroth, Trombetta, and others, has suddenly become a popular expedient for sciatica. Blum has reported a large number of cases of neuralgia treated by nerve-stretching successfully. The subject has recently been discussed by the Paris Therapeutical Society, Dujardin-Beaumetz having given the history of two cases of sciatica treated by him in this way. In one of the two cases the disease had existed for two months only, and the success was complete. In the other case, which had existed for three years, and was probably complicated with tabes, there occurred notable amelioration, but not a cure, for the patient still experienced pain on moving the limb.

The discussion at the Therapeutical Society was interesting in that the opinion of members respecting the treatment best adapted to the cure of sciatica was brought out. M. Paul expressed a decided conviction of the utility of galvanism. He stated in this connection a fact not sufficiently known, that the best results are had from a large number of elements—from 40 to 60. M. Dally expressed himself strongly in favor of galvanization, and against the method of nerve-stretching. M. Moutard-Martin was sceptical in regard to the good effects of nerve-stretching; he has heard of unfavorable effects following the operation, and has known of a case of *tic douloureux* of the face, in which Blum stretched the fifth nerve without any advantage to the patient. As these are well-known names, their opinions are entitled to some consideration.

PAROTITIS.

MUMPS, as it prevails under the usual conditions, social and sanitary, does not possess a high degree of importance, even when metastasis to the testicle takes place. Under some circumstances it develops an intensity of action which is quite unknown to the ordinary course of the disease. During the civil war epidemics of mumps prevailed widely, and were very injurious in their immediate and remote effects. A more or less profound adynamia was induced by the seizures, and a severe and protracted anæmia followed. Intercurrent pleuritis, pneumonia, peri- and endocarditis, sometimes caused a fatal result. Indeed, mumps came to be very much dreaded, and had importance as a cause of invalidism only second to the measles. It was dreaded not only in respect to the immediate disabling effects, but also because of the profound alterations in the composition of the blood.

In a communication which appears in this issue, under the title "Metastasis in Parotitis," we have the record of a very interesting case. These details cast a much-needed illumination on an obscure subject in pathology. Beside the double parotitis and the double metastasis, an attack of acute rheumatism is intercalated, and subsequently thromboses occur in most of the superficial veins. These facts indicate the serious changes induced by the disease in the composition of the blood. Some germ is received in the mouth of a susceptible person, and finds its way to the parotid gland — its proper habitat. Installed here, it begins a process of development which greatly irritates the gland. Usually, the poison is eliminated, probably, in the parotid secretion, and beyond some slight sympathetic fever, there is no further trouble. Under some circumstances, it may be because of crowd poisoning, and bad hygiene, the poisonous germs are produced in such abundance that they pass into the blood, and cause the serious condition familiar to us in the army mumps. In the case narrated in the paper which appears in our present issue, there seems to have been an unusual susceptibility, for there were two distinct seizures and two metastases. The remarkable severity of the sequelæ is to be explained by the number and development of the germs gaining access to the blood.

There are no other examples of metastasis so complete and satisfactory as that of mumps. No adequate explanation of the phenomenon has thus far been given. It is more than ever difficult to understand the metastasis in such a case as the present one, for the extent to which the parotid was implicated excludes from consideration mere functional disturbances. The phenomenon of substitution may be invoked to explain metastasis of merely functional diseases, but here more profound changes render such a solution of the problem unsatisfactory.

THE MEDICAL NEWS COMMISSION ON THE SOURCES OF BOVINE VIRUS.

OUR readers, we hope, have attentively read the valuable report on vaccine farms just presented in our columns from the commission organized to secure the information. The position which the

MEDICAL NEWS takes on this subject has been set forth in various editorials. We hold that the original Jennerian lymph, properly cultivated, has lost none of its protective power, and that the vesicle of to-day does not differ in any respect from the typical forms of the vesicles and crusts of Jenner's time. Careless vaccination, and improper methods of storing and preserving lymph, have, however, led to the deterioration of much that is now available for the general use. THE MEDICAL NEWS, also, holds that vaccine lymph properly selected and of right descent, never communicates any malady but the vaccine disease, which runs its course without ever impairing the constitution in the smallest degree. We admit that humanized virus carelessly selected, and mixed with the blood and pathological fluids of a diseased, especially of a syphilized, subject, may communicate disease germs to the healthy; but this almost never occurs.

Owing to the possibility of deterioration of humanized lymph, and of its being the medium for conveying disease germs, we hold it to be wise—in the absence of a proper supply of the original Jennerian lymph—to return to the first source of supply, the bovine virus. It is, then, of the first consequence that the bovine lymph be of good quality. Profoundly sensible of the evil which may result from the general use of improperly prepared bovine lymph, our Commission has examined into the methods, and into the sanitary condition of the vaccine farms or establishments whose products are offered to the medical profession. Without expressing an opinion as to their relative merits, which would be invidious, we may at least indicate those points which characterize a proper establishment.

It should have the constant personal supervision of a competent physician.

It should be in the best possible sanitary state.

The heifers should be carefully selected in accordance with the best experience.

The original virus should be from spontaneous cow-pox. Retro-vaccination—that is, the inoculation of the heifer with humanized virus—is a questionable practice and should not be encouraged as a means of vaccine supply.

The lymph should be taken from the vesicle when mature, and without admixture with other fluids.

The lymph on quills or ivory points is preferable to the crust.

ACTION OF ALKALIES ON THE URINE.

IN an interesting work on the subject of the Morbid Conditions of the Urine dependent on Derangements of Digestion, noticed in our present issue, Dr. Ralfe has brought forward additional evidence to prove the difference in the effect of alkalies determined by the period of their administration. It is not sufficiently known that the changes in the urinary secretion effected by alkalies differ widely when administered before meals and during digestion. In 1850, Dr. Bence-Jones—a physician much in advance of his time, by the way—demonstrated that large doses of carbonate of ammonia greatly increased the acidity of the urine on the following day. Four years afterward, Beneke made the same observation for carbonate of soda, and subsequently Parkes demonstrated the same result from the administration of bicarbonate of potash. This fact might, indeed, have been supposed, *a priori*, from the laws of diffusion. When a quantity of alkali is administered before meals, the acid-forming constituents of the blood must diffuse into the gastric juice. An immense quantity of acid material must then, during digestion and at its close, diffuse again into the blood from the stomach, and be eliminated some hours hence by the kidneys.

Far different is the result when any considerable quantity of alkali is administered during digestion. The acid already produced is neutralized, and, for some hours subsequently, a more or less alkaline fluid diffuses into the blood, and is eliminated by the kidneys. The influence which these observations ought to have on the time for the administration of alkalies is obvious. That they are new, is not to be affirmed in view of the brief history given above, but that they are generally known, cannot be alleged.

Applying the same principles to the administration of acids, we obtain correct guidance. Given before meals, they check excessive production of acid gastric juice; given during digestion, they add to the acidity of the stomach, and, consequently, of the blood. That these principles are generally applied, our observation does not permit us to conclude. We have reason to believe that they have been fully described in lectures on therapeutics, delivered during successive years in this city.

THE ILLINOIS STATE BOARD OF HEALTH.

HOWEVER anxious we may be to contest the late assertion of an eminent orator and divine, that "Philadelphia is now east of the centre of American civilization," we can scarcely claim much longer that medical science forms an exception to the spirit of his dictum. Especially is this the case since the Illinois State Board of Health, in which is vested the sole power of granting certificates entitling physicians to practise within its limits, has adopted its present high grade of collegiate qualification. As a result of careful enquiries addressed to all the medical schools, and to many prominent practitioners of the United States, it has recently been resolved that after the usual session of 1882–83, no medical college shall be considered in good standing unless the following elevated requirements are enforced. In the

first place, a preliminary examination or its equivalent must be insisted upon; secondly, instruction must be given and examinations *passed*, not simply in the seven ordinary branches of medical education, but in the two additional and important subjects of Hygiene and of Medical Jurisprudence; thirdly, actual (not merely nominal) attendance must be enforced upon eight-tenths of the lectures, etc.; and fourthly, dissection must be practised during two courses, and hospital and clinical instruction attended for two terms during the three full years of study demanded. After next year, therefore, the graduates of medical colleges, whose curriculum does not attain the elevation of these advanced requirements, cannot practise in any part of Illinois on the strength of their diplomas merely, but must pass a special examination before the Board of Health, which will test their knowledge in accordance with its regulations. If this admirable new departure, which was unanimously agreed to in the Board, can be fully carried out, health and life will be better protected in Illinois against incompetent and designing pretenders to a knowledge of the healing art, than in any other State of the Union. We offer our best wishes for the success of so promising an undertaking, not only on account of the benefits which must accrue to the people among whom it is enforced, but also and especially for the sake of the excellent example it will offer to other communities suffering from the twin curses of medical quackery and ignorance.

AMONG the most extraordinary arguments brought forward in favor of the recent action of the New York State Medical Society, one advanced by the *Chicago Medical Review*, in its issue of May 1, is worthy of notice. If it were in the issue of *April* 1, we should regard it as one of those specimens of rollicking humor for which our Western journalism is so deservedly renowned; but, as it is, it "passeth all understanding." The *Review* calls attention to what it believes to be the important and hitherto neglected point that the new Code will have a tendency "to stop those sporadic conversions from medicine to homœopathy which are from time to time reported," and adds: "There are many regularly educated practitioners in the homœopathic ranks who have joined the homœopathists simply to secure large consultation practices, or for the temporary *éclat* which such conversion will give them." It then asserts that "nothing will be gained by such renegadism in the future;" it will cease; "the populace" will no longer be influenced by it; and for this blessed change it awards in advance to the Code all the honor and the glory.

If we thought this represented faithfully either the logic or the morality of our esteemed contemporary, we should be deeply grieved; but we feel confident that either the gentle spring-time or too much wisdom has had the usual baleful effect upon the editorial mind. Otherwise we should certainly never find the *Review* advocating such pernicious doctrine. That even for the sake of the effect on the "populace" the *Review* should desire to make concessions to those of our members who are ready, for certain inducements, to join the homœopathic ranks, we can hardly believe. To be sure, it paints those inducements in glowing colors. "Large consultation practices" in themselves are very magnetic, but when they are combined with "éclat," it requires the stoutest principles to withstand them. We fear the effect of this announcement upon the mind of youth, ardent and impressionable youth, which is surely to be found among the *Review's* subscribers, and we hasten to assure *our* readers that, so far as our observation has extended, only very moderate consultation practices have been acquired in this manner; the "éclat" has not been of a character or quantity to satisfy those who hunger and thirst after fame, and even the "populace" have sometimes, with their traditional fickleness, failed to be influenced—"The people's voice is odd!"

Apostasy has never been accounted a high road to success.

For ourselves we may add that to any who may contemplate the step thus portrayed by the *Review*, we shall be glad to apply the ancient injunction of hospitality and "speed the parting guest."

As the *Review* expresses a desire to know how THE MEDICAL NEWS arrived at the opinion that, "the physicians of the United States are all but unanimous in their opposition to the new doctrine," we may respectfully refer it to our news columns, which have for some weeks contained the opinions of the medical journals of the country, and the resolutions of the various State societies in reference to the question.

We regret that when it called attention to the *Record's* "claim," that it is endorsed in its course by "letters from all over the country," it did not manifest the same praise-worthy curiosity, as we could then have cordially united with it in again repeating our request for information, first made five weeks ago and yet remaining unanswered.

WE take pleasure in calling attention to the resolutions, on page 591, which Dr. E. R. Squibb gives notice he will present to the New York State Medical Society at its meeting in February next. Dr. Squibb publishes these resolutions now, in order that the views of the entire profession of the State, in reference to the New Code, may be fully and fairly ascertained.

SPECIAL ARTICLE.

THE MEDICAL NEWS COMMISSION

ON THE

MANAGEMENT OF VACCINE FARMS AND ON THE PROPAGATION OF BOVINE VIRUS.

(*Concluded from p. 550.*)

ADVANTAGES OF ANIMAL VACCINATION.

WE do not propose to consider here the comparative value of humanized and bovine lymph. It is enough to know that animal lymph is the progenitor of all vaccine virus, and, therefore, cannot be less protective against small-pox. There are only two advantages of animal vaccination to which we will refer: *First.* The confidence which is placed in animal lymph as being free from the slightest imputation of impurity, is calculated to minimize the opposition to vaccination. When an epidemic of small-pox is threatening, it has been found difficult, and even impossible in some places, to induce people to submit to general vaccination and re-vaccination with humanized virus. This was the case in Boston in 1872–3, when the municipal authorities found it quite important to pay, very much against their will, some $20,000 for animal virus, which was used with the greatest success, and to the freest acceptance of the citizens.

Second. In times of widespread epidemics, when people become thoroughly aroused to the importance of vaccination and revaccination, the supply of reliable humanized virus has been found less than the demand. Very great and numerous were the complaints from London a few years ago about the dearth of vaccine virus there. If the National Vaccine Institution of England, with all its excellent appointments for carrying on Jennerian vaccination, cannot meet the demand in times of small-pox excitement, how infinitely greater must be the paucity of virus at such times in those countries whose government takes no interest at all in the important matter of vaccination and vaccine supply! Now, one of the strongest arguments in favor of animal vaccination is that, by this means, virus sufficient to vaccinate whole communities can be furnished at very short notice. All that is needed to attain this end is that a sufficiently large number of animals be vaccinated. Hence, the supply of virus by animal vaccination need only be limited by the demand.

HOW THE STATE CAN ENCOURAGE AND PROTECT ANIMAL VACCINATION.

The cultivation of bovine lymph of the highest standard of excellence so directly concerns the public welfare that the State should feel called upon to support and protect this important interest. So far as we know, Belgium is the only country which has shown anything like a proper appreciation of this matter. Animal vaccination was introduced in Brussels by Dr. Warlomont in 1865, and has ever since been carried on under his skilful management very successfully. It was not long after its introduction before the value of bovine lymph was fully recognized by the profession, and the Council on Public Hygiene earnestly recommended the government "to favor, by all means in its power, the foundation of an establishment where the cow-pox could be propagated on heifers." After having thus been brought to the notice of the government, the Minister of the Interior of Belgium requested the Academy of Medicine to duly consider the question, and report to him its conclusions. Accordingly, a committee was appointed by the Academy, of which Dr. Vleminckx was chairman, and the following conclusions were submitted:

"The committee is of opinion that the following reply be sent to the Minister of the Interior: (1) The Academy has already recognized the utility, and even necessity, of renewing vaccine, and has not changed its opinion on this matter. (2) A really practical method of obtaining this renewal would consist in the extended application of animal vaccination, founded on the inoculation of spontaneous cow-pox upon heifers, on which the products of this inoculation should be unceasingly kept up by the processes recently introduced into science."

After consulting, also, some of the provincial councils of medicine, the government of Belgium created, in 1868, what is now called the "*Institut Vaccinal De L'Etat, A Bruxelles.*" It does not appear that the government has supplanted Dr. Warlomont, and established an institution of its own, but rather that Dr. Warlomont's interest in the material produced is allowed to continue; the government simply gives to the institution protection and patronage, and grants a moderate annual subsidy to Dr. Warlomont for certain services rendered to the public.

As showing the general confidence which is given to the virus from this institution, Warlomont says that, as early as 1873, of the one thousand physicians practising vaccination in Belgium, seven hundred and sixty-eight have obtained points from this source. Also, in a letter to Dr. Martin, he states that the day previous to writing the Queen of England and several of her family were revaccinated from his institution.

Concerning the prophylactic power of this virus, Warlomont remarks:

"Out of more than ten thousand children vaccinated at Brussels with animal vaccine, from 1869 to 1870, not one case was, to my knowledge, noted as having been attacked by the epidemic which terrified the world in 1870 and 1871. The same immunity was shared by our revaccinated cases, which, though not nearly so numerous, were, at the same time, in the foci of the epidemic."

By reference to the mortuary tables published in the *National Board of Health Bulletin*, we find that during the last two and a half years, only fifty-five deaths from small-pox have occurred in Brussels, which has a population of over 400,000; and there has been this comparative exemption from the disease in Brussels, notwithstanding that within the same period an epidemic of considerable magnitude has prevailed at Antwerp, only thirty miles distant.

All that Belgium has done for animal vaccination in that country, might be done here by each of our State governments. If each State were to create a vaccinal institution, place it under the charge of the State Board of Health, with full power and ample means to carry it on efficiently, we might then be

able to obtain, at all times, reliable, safe, and trustworthy bovine virus. The subject is one of such momentous importance to the public, that it is certainly worthy of profound attention.

We will conclude the subject of our investigation by saying we are fully convinced that the propagation of animal virus is a service requiring very exact management, and should be committed to no hands but intelligent and conscientious physicians. The production of pure and reliable bovine lymph is a matter of such infinite value to humanity, that the State should surround this very delicate work by its strong arm, and guard it well by some wisely constructed law. But in the absence of any such protection, medical men themselves can do very much for the cause of true animal vaccination by patronizing only those physicians who are worthily devoting themselves to the specialty.

REVIEWS.

ON THE MORBID CONDITIONS OF THE URINE DEPENDENT UPON DERANGEMENTS OF DIGESTION. By CHARLES HENRY RALFE, M.A., M.D., Caius College, Cambridge, F.R.C.P., etc. Pp. 148. London: J. & A. Churchill, 1882.

THIS is a valuable and suggestive monograph on the subjects embraced in the above title. It contains chapters on the following:

Formation and removal of acid from the body; Dyspepsia associated with an acid condition of the urine; Dyspepsia associated with an alkaline condition of the urine; Derangements associated with deposits of uric acid (relationship of lithæmia and gout); Derangements associated with deposits of oxalate of lime; Derangements associated with excessive elimination of phosphoric acid, and an appendix, effect of bicarbonate of potash on the acidity of the urine. All of these topics are treated in a fresh and interesting manner. Especially valuable is the exhaustive treatment of the subject of uric acid, the importance of which as a factor in pathological processes, the author of this work holds to be much less than is commonly supposed.

CHRONIC BRONCHITIS—ITS FORMS AND TREATMENT. By J. MILNER FOTHERGILL, M.D., Edin., etc. Pp. 160. New York: G. P. Putnam's Sons, 1882.

ANOTHER book from the fertile and graceful pen of Dr. Fothergill. It "is intended for practitioners, and especialiy those who are commencing practice." As ready as Dr. Fothergill is, he had some trouble to make a *book* out of his materials. He brings in not a little of extraneous matter, which is always well, even picturesquely said, but it is not what the buyer of the book pays for. In the Introduction he describes "the old peasant, bent with toil and lumbago," "the old dame who sat by her fireside, her favorite cat sleeping cosily at her feet," etc., the "quiet country landowner, a 'laird,' but scarcely a squire." He tells us also how "on a wet day, and when time hung heavy, it was customary to set to work after breakfast and replenish the large bottles of cough-pills, against the requirements of the coming winter." It is in this fashion he introduces the subject of chronic bronchitis. Such were the types of cases met with in Westmoreland, and with which his earliest experience was concerned as a pupil and associate of his father, a general practitioner of that region.

Under the term chronic bronchitis he includes the cirrhotic form (by which he certainly intends *sclerotic*), which is chronic interstitial pneumonia; the emphysematous form—one form of emphysema; the degenerative form, which is senile bronchitis; and the mitral form, which is really the result of a mechanical stasis. By bringing in so many morbid processes, he manages to eke out his book to the proper dimensions. Under one term he lugs in substantive bronchitis, and a number of conditions of which bronchitis is a mere symptom. The descriptions are sketchy, superficial, and sensational, although much useful information is conveyed.

Dr. Fothergill is a polypharmacist. His prescriptions are composed of many ingredients—one, usually, for every prominent symptom. "The ordinary prescription for chronic bronchitis, especially with emphysema, in use with me, at the Victoria Park Chest Hospital, is:

Amm. carb.,	gr. v.
Tinc. nucis vom.,	♏x.
Tinct. scillæ,	ʒss.
Inf. serpentariæ,	℥j.

Ter in die.

And a very serviceable mixture it is." Somewhat more than two tablespoonfuls at a dose, is his conception of an agreeable quantity, and to this he sometimes adds ten drops of tincture of digitalis, and then "the combination is very satisfactory," he informs us (p. 122). The following is, in his opinion, the most elegant and palatable cough mixture ever prescribed:

Syrp. scillæ,	ʒj.
Acid hydrobrom.,	ʒss.
Sp. chloroformi,	ʒss.
Aq.,	℥j.

The above is a verbatim transcript of the perscription as given in the book, p. 122.

As a further exhibition of some remarkable therapeutical notions, we quote: "When the temperature oscillates daily, and the temperature chart shows diurnal peaks, then it is well to give this combination:

Quiniæ sulph.,	gr. ij.
Ac. phosph. dil.,	♏xv.
Tinct. digitalis,	♏x.
Inf. gent.,	℥j.

Ter in die.,

which will often shave down the peaks in a very satisfactory manner."

Dr. Fothergill, it is evident, is a very eccentric man.

SOCIETY PROCEEDINGS.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting May 18, 1882.

FORDYCE BARKER, M.D., PRESIDENT, IN THE CHAIR.

AFTER the reading of the minutes of the previous meeting, DR. LEWIS A. SAYRE, in a few well-chosen words, referred to the character, scientific attainments, and life-work of the lately deceased Fellow of the Academy, DR. JAMES R. WOOD.

Dr. Sayre then presented the following resolutions in the name of his friend and colleague, Dr. William H. Van Buren:

Whereas, It has pleased Almighty God to remove from his place amongst us our associate, James R. Wood, M.D., it behooves us to express the regret we feel at our loss, and to place on record our high estimation of his many good qualities. It is, therefore,

Resolved, That in our late friend and Fellow we recognize the possession of exceptional energy and courage, which manifested themselves throughout his

life in unceasing devotion to the interests of the sick and suffering, and especially to the interests of the sick and suffering poor, amongst whom his efforts in their behalf are preserved in grateful remembrance.

Resolved, That, in view of the great loss they have sustained, we tender our sympathies to the numerous pupils of our lamented associate in all parts of our country, for to them and their interests he most faithfully devoted himself throughout his professional life, and by their grateful affection his reputation will be most honorably preserved and sustained.

Resolved, That in our late associate we recognize a citizen of large public spirit, who was always ready, by word and deed, to lend his aid to all measures designed for the public good, whether in time of pestilence or war.

Resolved, That we respectfully tender our sympathies to the family and immediate friends of our deceased member, assuring them that we shall not soon cease to regret his absence from his accustomed place amongst us.

DR. WILLARD PARKER seconded the resolutions, and added a few personal reminiscences, stating that it was now more than forty years since he made the acquaintance of Dr. Wood. Dr. Wood was, he said, one of the most active men he ever knew in or out of the profession. The achievements of his life finely illustrated what a man could do by singleness of purpose. He detailed the valuable service rendered by Dr. Wood in securing the passage of the law legalizing dissections of the human body, and the development of Bellevue Hospital.

Dr. Detmold and the President made some further remarks relative to the great value and practical nature of Dr. Wood's labors in medical science.

The scientific work of the evening consisted of some *Remarks on Lithotrity, with Evacuation*, by DR. HENRY J. BIGELOW, of Boston. Dr. Bigelow spoke extemporaneously, and illustrated each point with instruments and blackboard drawings. When, he said, your distinguished President was kind enough to ask me to make some remarks upon this subject, I felt that it had become altogether so old and so familiar to most of the gentlemen that it could offer little of interest. It was only at a subsequent time, when he was kind enough to ask me, that I felt it was due to the subject to give it the advantage of some discussion in the light of the experience of New York surgeons.

I could not forget, either, that it was in New York that the subject received its first distinct appreciation in the way of practical experiments and in print, at a time when it needed friends. I would especially mention the name of Dr. Van Buren in this relation.

The subject, as you know, is a purely surgical one, and even in its modern light or phase, something more limited than that—it is almost mechanical. What has been done of late years in this direction deals with operative surgery. In thinking over what might possibly be acceptable to those gentlemen interested in this topic, it occurred to me that as pure mechanics was the branch which had modified lithotrity, the consideration of this part of the subject would be of most interest.

I do not think we have changed our views in regard to the pathology, but the operation is quite different from that formerly in vogue, and changes are still being made. There are one or two points in connection with these changes that I have been especially desirous of bringing before some of the gentlemen present.

The part of the subject of which I will speak is purely operative; it deals with physics, perhaps more so than almost any other subject in surgery. Accidentally, the new instrument which has changed our views in regard to the tolerance of the bladder, has to do with air, water, and solids. Any of the old instruments for breaking stone will answer the purpose, and it becomes a matter of convenience what instrument will do best. Although, in 1878, at a discussion in London, upon lithotrity, it was stated by Sir James Paget and others, that the subject had probably been developed as far as it could be and no further improvments were likely to be made in the instruments used, or the operation; yet curiously enough the instruments have been materially modified. So, though the operation can be performed with the original instrument, it can be done much better with those we have now, and, as a matter of convenience, I think it is best to use them.

The whole subject is embraced in breaking a stone and getting it out of the bladder. This was done many years ago. For about half a dozen years the breaking was done in two to seven minutes. A good while ago the operation occupied a longer time. When Civiale began, he sometimes took half an hour, but when he improved the instruments he reduced the time of sitting to three or four minutes, and since then that has been the rule. It was now thought desirable, because of certain accidents happening, to get rid of the fragments immediately after crushing. It so happened that when we could get the stone entirely out of the bladder these accidents did not so frequently happen. In short, the inflammation seemed to be due to the fragments left in the bladder, and not to the instrumentation. The reason why these fragments were not gotten rid of was because the means did not exist for removing them. When they came to be removed by modified instruments, the bladder was found to be tolerant, and the abstract discovery which forced itself upon us was the tolerance of the bladder, which, curiously enough, had not been suspected. Believing the bladder not to be tolerant, and accidentally finding out the exact opposite to be true, is one of the kind of errors which lead us to doubt everything. It was the small catheter of Clover's instrument that had retarded progress.

In 1846 Sir Philip Crampton took out one hundred and twenty grains of stone by vacuum. If we would reduce all stone to powder, evacuation would be effected through a No. 21 catheter, French, but this would entail suffering to the patient and inconvenience. In the original Clover instrument, familiar to all lithotritists, the vacuum was produced by means of a rubber bag. The only thing which can in any sense be called new is the use of No. 25 or 26 catheters (French) up to No. 31. And even a large catheter had been used in former times. The instrument of Collan, which I think was made for Nélaton, had a French catheter of No. 25 or 26, but it did not work. It was clumsy, and, for various other reasons, inefficient.

The novelty of our present instruments consists in the combination of a large catheter with efficient suction. If a large catheter had been used with Clover's instrument it would have emptied the bladder. In Clover's instrument the suction is not sufficient, because it cannot lift a column of water the height of the catheter. The bag should be stronger. In regard to a straight or curved catheter, I personally prefer a straight one. I think it is easier of introduction. However, it is largely a matter of individual preference which is used. In making the orifice of the catheter two things are to be considered: ease of introduction, and keeping away the walls of the bladder. For this purpose a projecting lip is wanted. The opening should not be too large, otherwise it will invite larger fragments than can pass through the catheter. At the orifice the wall of the tube should be thickened so as not to cut the canal as it passes.

The next point is the important matter of obtaining a fragment when it gets out of the bladder. If a fragment comes almost to the end of the catheter, it goes back into the bladder. If it comes a little further, it seems as if the surgeon ought to have the means of

catching it and preventing its return. Yet, up to this time, all evacuators return to the bladder from a third to a half of what they take out. For a time this was supposed to be due to a long tube, but the fact is, the fragments are returned from the bulb. I have tried in various ways to devise a trap at the head of the tube which would catch and prevent the return of these fragments. To this end I had constructed a little glass cylinder containing a valve and rubber ball, which is intended to play backward and forward each stroke. In aspiration, this ball rises and admits the fragments, and then falls against the end of the tube. The tube is perforated at the sides near the end, so as to admit of the return of the water to the bladder. Another arrangement consists of a little cotton rag attached to the end of the tube in the form of a sleeve. Both of these arrangements work very well, but are a little complicated, and are apt to clog. I have tried all varieties of valves, and think that no metal valve will work satisfactorily, even when the hinges are made upon pallets, for they will become clogged. Hence we are obliged to resort to other expedients, which we will consider later.

I wish now to speak of the evacuator. As I have already said, it has to deal with air, water, and fragments; and, curiously enough, it is very difficult to make all these do what you want. You make your evacuator work, and it is inconvenient; you make it convenient, and it won't work. There are several points to be taken into account. You can either place your receptacle for the fragments between the catheter and the bulb, or place it in the bulb. Suppose we have the original instrument of Clover; a receptacle can be placed between the glass tube at the head of the catheter. This works well, but it is difficult to get the fragments out; and with any such arrangement outside, it is found in operating that the instrument is a little difficult of handling. If the fragments are allowed to go into the bulb and drop, this shortens the bulb from end to end, which is a very important matter. Again it is very desirable to place the axis of the bulb in a line with the axis of the catheter. If you place it above, you are acting at a great disadvantage; there is a leverage which you don't have when the handle is in a line with the catheter. Having disposed of this, it becomes a question how you will attach the catheter; whether or not you will attach a piece of rubber tube to the end of the catheter, between it and the bulb, so as to allow the weight of the bulb to be supported by a stand. My prejudices have always been in favor of a stand, but I find that nowhere do operators use a stand. This rubber or elastic tube can be made in various ways. If straight, it is liable to bend upon itself in such a way as to obstruct the flow of the stream. If made curved, it does not double upon itself. It is no sort of matter where the catheter, or tube connected with it, enters the bulb, provided it brings up somewhere below the top, so as to make an air chamber. Whenever the tube is not prolonged so as to project into the bulb, a defective instrument results, for no air chamber is obtained.

This brings me to the point of showing how regurgitation takes place. By introducing a piece of glass tube between the catheter and bulb in the ordinary instrument, when I aspirate you will see the fragments pass up the tube and rise in the bulb, but instead of being deposited in the receptacle the fragments pass back into the bladder. The overcoming of this difficulty underlies the making of an efficient evacuator. Some of the fragments will return unless prevented by a strainer. One of the difficulties has been that bulbs have not been made stiff enough. The suction has not been sufficient to raise the fragments entirely out of the catheter. Another difficulty has been the regulation of the amount of water in the instrument and the bladder. To accomplish this, I have had attached to my bulb a rubber tube, the free end of which is placed in a tank of water. The tube is provided with appropriate cocks, and the regulation of the amount of water and air present becomes a simple matter. This I consider very important, for bladders are not all of the same size and they are not all equally distensible. In a small bladder it is sometimes difficult to get the "biting" sensation, a sensation very like the nibbling of a fish at the hook. This indicates that not enough water is present in the bladder. All that is necessary to supply the deficiency is to open the cock of the supply tube connected with the water tank and allow the water to flow into the bulb. The tunnel with which some instruments are provided will answer the same purpose. But suppose the reverse of this is true; there is more water present than is wanted. The tunnel will not serve as a means of getting rid of the water. Without the hose, it is necessary to detach the instrument, pour out an indefinite quantity of water and replace it. But with the hose you can much more conveniently accomplish the same thing, and furthermore can graduate the amount of water to within half a drachm. If the bladder is a little lax, you have only to open the cock and admit a little water. On the other hand, if the patient suddenly strains as in vomiting and the bladder becomes unduly tense, you can open both cocks, the one at the head of the catheter and that of the hose, and thus obtain free exit of any amount of water. As soon as the patient ceases to strain, the water flows back into the bladder of its own accord. So, I believe the hose pipe a valuable addition, and I should not know how to work without it.

I will now show you the instrument I have finally settled down upon as being the best. Its form, as you see, is that which most conveniently rests within the concavity of the hand, being spherical. It is very short from end to end. Regurgitation of fragments in the bulb is prevented. The obliquity of the tube carries the receptacle high in the air, which is much better than having it between the patient's thighs. I prefer two stop-cocks; a bulb or tunnel can be attached at pleasure. Strainers become clogged; especially is this the case when you have an inflamed bladder; they become clogged with fibrin, and it is necessary to remove them, brush, and restore them to position. This difficulty is met in the following simple way: The sides of the projecting tube are perforated all around, so that the sum of the small perforations is greater than that of the opening in the end of the tube. The momentum given to the fragments brings them well out of the catheter into the bulb, but there is no such force to return them through the opening in the end of the catheter, for the water seeks its return through the smaller openings which do not admit the fragments. The practical working of this instrument is most satisfactory; it prevents the return of fragments to the bladder.

Dr. Bigelow made a few remarks on lithotrites; the most convenient instrument he said, was that which was best adapted to the movements of the hand, abstractly considered. This he considered to be twisting or rotation, and so constructed his instrument in accordance with this idea. He did not lay particular stress upon the use of any one instrument.

Drs. Keyes, Weir, Gouley, Otis, Sands, Sayre, Detmold, and Parker, participated in the discussion which followed the reading of the paper.

WEST PHILADELPHIA MEDICAL SOCIETY.

Stated Meeting, May 1, 1882.

S. S. STRYKER, M.D., PRESIDENT, IN THE CHAIR.

A Case of Hydrophobia.—DR. CHARLES W. DULLES, in presenting the following report, said that cases of

hydrophobia are so rare that it has seemed to him worth while to record one which came under his observation a few months ago.

C. H., aged nearly sixteen years, of a nervous temperament, with a spare, but well-knit frame, being in perfect health, was bitten on the anterior surface of the end of his right ring-finger, on January 11, 1882, by a young coach-dog, with which he was playing. The dog had, it is said, been sick for a few days and had quarrelled with other dogs for a day or two, one of these quarrels being conducted through a hole in a fence, partly stopped with a piece of tin, the dog's lip was cut by this tin. This was the day before C. H. was bitten. The wound in the boy's finger was about an inch long. It was made while the dog was springing up at his hand, held above him in sport.

The wound was at once filled with common salt, and the boy hurried to a drug-store near by, where, within a few minutes after its receipt, the wound was deeply cauterized with the solid stick of nitrate of silver. After this it healed up without apparent inflammation.

The dog, on the day before—some say the same day—bit another dog, which was kept under observation, and lived and was well for two months, when it died one night in its kennel at the age of sixteen years. The dog that did the biting was shot the same day on which it occurred.

Although C. H.'s father asserts positively that the boy gave no indication of fear of hydrophobia, it is noteworthy that the boys who were his companions told him he would "*go mad*," and his fears of hydrophobia were so much excited that his father was led to take him to a small town where a man dispensed a "sure cure" for bites of mad dogs. This was a decoction which, taken in three doses of a pint each, purged the boy well. After this, the neighbors say, the boy continued to express fears of having hydrophobia, which were increased by newspaper accounts of a case which came in his way.

However, on February 6, twenty-six days after he was bitten, he became low spirited, had malaise, complained of slight chilliness, and some twitching of the right arm. This was, by his father, attributed to a cold, and he was given a light dose of salts, and his feet were bathed in mustard-water. His indisposition, however, continued.

The next day he had no appetite, and ate for breakfast only a few crackers. At noon, a homœopathic practitioner was called, who left a powder, which was put in water, and a teaspoonful of the solution given every two hours. The boy now had considerable nervous excitement. He lay on a lounge most of the day, and did not go to bed till evening. During the night he became worse, and was seen at 9.30 P.M. by the same practitioner, who left two powders. Both were taken, but seemed to do no good.

Sometime before nine o'clock in the morning of February 8, this doctor came again, mixed some medicine in water, "to quiet his nerves," and ordered a teaspoonful to be taken every two hours. This the patient, it is said, could not, and certainly did not, take. According to his father's account, any attempt at taking water excited horror in his mind, and he snapped at everything that came near him.

At this juncture a messenger informed the homœopathic practitioner that his services were no longer needed. He yielded up the case with apparent willingness, and the messenger came and asked me to take charge of it.

I went, reaching the patient a few minutes after nine o'clock in the morning. When I first saw him, the tableau was a horrible one. The room was partly darkened and in great confusion, the bed was disordered, the covers tangled about the young man's legs. His underclothing was soaked with perspiration, saliva and vomited mucus. He himself was a frightful object, held as firmly as possible by three men—one of them his father—of whom two held his arms and one held down his legs with a loose straw mattress. Nevertheless, they all could not prevent him from incessantly springing forward into a sitting posture, or tossing himself from side to side in bed. The bed covers, and even the mattress, were in great confusion and smeared with viscid saliva and vomit. He was constantly hawking and spitting up tough, whitish saliva. This he spit out in whatever direction his mouth happened to point, striking the bed, the floor, or his keepers, without discrimination. He cried out from time to time in a howling, demoniacal fashion; again he complained of thirst, saying he had not drank anything for five days. He grasped at his throat, and said he was choking. At times he grinned horribly. His eyes were staring, the pupils enlarged to their utmost extent, the iris a mere line around them. His face was bathed with clammy sweat, his body and underclothes drenched. His surface was cold; his face was very pale and livid; his hands were of a dusky, congested red; his legs slightly dusky; his pulse was about 160, not to be counted, and scarcely to be felt at all in the radial arteries; his heart was acting violently and tumultuously, with some muffling of both the systolic and diastolic sounds.

His mind was at times perfectly clear, at others he rambled, and at others still he shouted in delirium. He had been retching and vomiting violently, and rejecting everything that went into his stomach, which rumbled horribly. The first thing I did was to find, and to show his attendants, that scarcely any force was required to control his movements. I spoke to him encouragingly and firmly; and, assuring him that he would feel better if his stomach were not so empty, I had some milk brought, and gave him, with a teaspoon, about a third of a teacupful. Each swallow was taken with great difficulty, and only after a hard struggle, and in a few minutes he vomited again. Not long after, his ejections were mingled with matter which I took to be blood, caused by capillary hemorrhage as a consequence of his very violent retching. (Microscopic examination showed this to be only biliary matter, and not blood.) I now gave him two parvules of morphia, each containing an eighth of a grain. Soon after taking these he vomited. I next dropped a quarter of a grain, in powder, upon his tongue, and soon after I gave another equal quantity hypodermically.

These produced no effect upon his pupils, but after receiving them he was less agitated and more rational. He now took some more milk, which stayed in his stomach. Occasionally, at his own suggestion, he sat up and took this from a cup, which he held to his mouth with both hands, trembling violently. When one swallow reached his fauces he would give a cry, thrust the cup violently from him, and dash himself back upon his pillows. He was also given whiskey and hot water, which he retained.

He complained only at times (not invariably) of the opening and shutting of the door of his room. But the least breath of air—even that caused by people speaking to him—was a constant cause of complaint, and an unfailing occasion of a clonic spasm. At no time, while I saw him, did he have a tonic spasm. Just before noon he began to imitate barking. He seemed to be thinking, and then uttered the syllable "Bow"—followed after a short interval by another, and then another after a shorter interval. This was not a sound at all like the barking of a dog, but a plain and, I thought, tentative imitation. The boy seemed to be observing himself, and not to be sure whether he ought to do this or not. When I charged him to stop, he desisted entirely. Just after noon he took some

boiled rice with sweetened milk; of this he seemed quite proud when I next saw him, and expressed some hope that he would pull through yet. He frequently protested that he was doing all he could to restrain himself, and promised to do his best still.

At about 2 P. M. Dr. Charles K. Mills saw him with me. At this time he was more calm than he had been, listened attentively, and replied perfectly rationally to all that was said to him. Dr. Mills charged him to stop spitting, and when it was put on the ground that swallowing his saliva would do him good, he did stop spitting almost entirely. He also now expressed a desire to urinate, and did so upon a towel, to his evident satisfaction.

His pulse was at this time almost undiscoverable at the wrists; his hands were cold and cyanotic, as were his penis and scrotum. His legs were not very cold, but they were dusky. He was now given (at 2.15 P.M.) a half a grain of morphia hypodermically over the sternum, and half a teacupful of a mixture of equal parts of milk and whiskey; he also ate a little milk toast. An hour and a half later (3.45 P. M.) I found him calmer, with pupils less dilated, the iris being plainly seen. I now gave him a teaspoonful of tincture of digitalis, and nearly a teaspoonful of aromatic spirits of ammonia, by the mouth.

Half an hour later he was carried into an adjoining room, which was more spacious and better ventilated than the one in which he had been lying. I, myself, supported his shoulders and head. While being carried he held himself perfectly rigid. As soon as he was laid in the new bed he flung himself violently over on his face, and vomited some glairy, grumous mucus, mixed with bile. When he was quieter I gave him another hypodermic injection over the right chest-wall, consisting of half a grain of morphia, dissolved in thirty minims of tincture of digitalis, and soon after left him.

After this, I am told, he complained of the noises of the street, became restless again, flung himself about in his bed, and two men who were watching him exerted considerable force to keep him still. He demanded to be moved into a third room down-stairs and was impatient when this was refused. About half-past five he had some new struggles, and then, his father says, "his eyes became fixed," and, at twenty minutes before six o'clock, he quietly died.

I called to see him by appointment at 8 P.M., and found that death had taken place. His body was still warm, his face very pale, his eyelids open, his pupils dilated.

I endeavored to secure a post-mortem examination, but this was not permitted.

After the experience furnished by the case just narrated, I have made some researches in regard to hydrophobia, with the hope that they would furnish me with tests by which I could satisfactorily decide for myself the question whether it was a case of true hydrophobia or not. But in this I have been disappointed. I am not yet able to express any positive conviction. On looking over the notes made at the time of its occurrence, and comparing them with those of the many cases of others which I have examined, I find that they present a no less complete picture of this disorder as it is described by authors.

And yet, when I stood by the boy's side, I felt convinced that this was a case of purely psychical disorder. I have seen and there are abundant records of phenomena similar to some of those here presented, in cases of great nervous excitation, in grave hysteria, and in the nocturnal frights of nervous children. Further, the theory of hydrophobia held by all who believe in it at all, is that it is due to the activity of a special poison, and yet in my case—as, indeed, in most cases—there were intervals of lucidity and self-control which were so complete that I could hardly suppose there was here a disease like any other contagious or infectious disease.

In fact I have found myself unable to decide definitely as to the nature of the case. So, I put it on record for the benefit of others, with a title which will identify it as belonging to a class that has not such unmistakable characteristics as to make it easy to separate in it the true from the simulating.

In concluding, I would call attention to the fact that the study of this subject is made much more difficult than it would otherwise be because of the carelessly observed and inaccurately reported cases with which its literature is crowded. Many reporters do not seem to have suspected that the disease is simulated by inflammations (especially chronic) of the brain, by epilepsy, by hysteria, by delirium tremens, by acute mania, by simple anginas (in children), by reflex irritations of the nervous system, and by the effects of fright alone.

This should be always borne in mind, and never overlooked, when, as is usual, one is surprised with a case of so-called hydrophobia.

It is well not to forget, also, that some careful and critical investigators have concluded, not only that almost all cases of so-called hydrophobia are spurious, but even that there is no such specific disease at all; that the relation of the disorder to the bite of an animal is simply a *post hoc*, not a *propter hoc*.

This leaves, it will be seen, a good deal of room for keen scrutiny of all cases that arise, and justifies considerable scepticism in regard to very many already on record.

On the other hand, some of the ablest writers upon this subject, knowing the grounds for the scepticism of others, believe all that these preceding sentences deny or put as doubtful. The study of hydrophobia has been pushed with such diligence and such refinement of observation and of generalization that there lacks no feature of the picture set up by its investigators, from the discovery of the very *contagium vivum* which initiates it to the description of the microscopical lesions of the brain and nerves which are its final expression.

Such being the case, there is need for most careful and minute observation and recording of the phenomena any case may present, and their estimation without too easy credulity or too hard scepticism.

As to the treatment of hydrophobia, there is little to say—nothing is of any real avail against the true disease. Cures have been claimed by innumerable methods; most recently by the administration of curare or the inhalation of oxygen. Neither can be relied on. The former is dangerous, and has doubtless hastened death in some cases. The latter is probably merely a sufficient distraction to quiet an imaginative and lyssophobic patient, although it may tend to counteract the effect of the disturbance of respiration which is often present. Hypnotics and anæsthetics have utterly failed to cure hydrophobia; and one might as well give a *placebo* and await developments to torment himself with the struggle to find some means of relieving his patient, were it not for the fact that there are constantly occurring spurious cases, and that some of these are, by active treatment, rescued from the death which their fears would bring to pass. For such, I think the inhalation of oxygen should be first used, if it can be, and then that of chloroform or ether, conjoined with the hypodermic injection of a moderate dose of morphia. I say moderate, for the large doses that have been given have never saved life, and it may be they have helped to sacrifice it.

If this be joined to firm moral and mental support, all will be done which I believe can be done. There is rarely any necessity for physical restraint of the

patient and there need be no fear, for there is absolutely no danger, of the disease being communicated to another human being. This has never happened.

DR. HARRISON ALLEN gave the following brief account of a case of hydrophobia recently under his observation:

In the latter part of December, 1881, I was called to see a young man, by occupation a bank messenger, 21 years old, who had been complaining for about 24 hours of an indisposition as to whose nature there was no particular clue. When questioned as to what the matter was, he took a deep inspiration, and, speaking with a peculiar explosive, expiratory effort, simply answered, "I'm very nervous," which was the sum total of his description of his difficulty.

Something in the appearance of the patient caused the suspicion that the case might be one of hydrophobia, and I accordingly asked that a glass of water might be given him. He attempted to drink, but the fluid seemed to be arrested in his throat as if by a constriction. Some of it, indeed, apparently entered the œsophagus, but the larger quantity was blown with considerable force from the mouth.

Inquiry made at the bank where the patient was employed developed the fact that three and a half years before a strange dog had run into the building, and upon an attempt on the part of my patient to caress him snapped and bit the lad on the right thumb. Nothing further was known of the history of the animal. It could not be learned that the wound had ever been cauterized, the case having been treated at a neighboring drug store and afterward at a dispensary. The patient had never been told that the dog was mad, nor had he seemed to suspect it himself.

Dr. H. C. Wood saw the case in consultation. We could discover no element of fright, and our suspicions as to its nature were carefully concealed, even from the mother, until duty compelled us to mention them to her. She was cautioned that she must on no account suggest them to her son.

As the case developed, no violent symptoms whatever were presented, and at no time was it necessary to forcibly restrain the patient.

The treatment consisted in the use of opiates and chloral. One-sixtieth of a grain of eserine was twice injected hypodermically. The duration of the case was 48 hours. Four or five hours before death the patient had marked hallucinations, followed by stupor with slow, heavy breathing. From this condition he would gradually rouse, becoming apparently quite himself and able to recognize those about him, but the hallucinations would soon recur. The Cheyne-Stokes respiration was well developed toward the close. He died quietly, with neither hallucinations nor any semblance of convulsion.

An autopsy was obtained, the medulla oblongata removed, and now is in the hands of Dr. Wood.

DR. C. K. MILLS, who was present by invitation, expressed his views in regard to hydrophobia. He doubted that there was any such real disease as hydrophobia in man. He had seen three cases so named, and had made a post-mortem examination of a fourth. On two cases he had also made microscopical investigations. He could not, of course, assert positively that there was no such disease as hydrophobia in man; but was prepared to say that he believed all the cases so called could be explained on some other hypothesis, such as that of lyssophobia, tetanus, chronic or acute nerve lesions, extravasations, etc. Of the cases in which he had made post-mortem examinations, he had found in one evidences of chronic cervical pachymeningitis, and in two only such lesions in the floor of the fourth ventricle as are common to all spasmodic affections.

There are many cases of spurious hydrophobia. Many die who have been bitten by dogs not mad; and many bitten by mad dogs do not have hydrophobia. The theory that hydrophobia is due to a virus locked up for months and years in a scar on the finger, did not appear to him rational.

DR. H. F. FORMAD referred to the artificial production of hydrophobia in animals. He had been experimenting by injecting cantharides into the livers of dogs. in order to produce abscesses. Out of twelve dogs so treated, four had symptoms similar to those of hydrophobia. This was so striking that he did not kill them, but penned them up, and saw that they had all the symptoms of hydrophobia. On making autopsies, he could not find any lesions visible to the naked eye.

He experimented with the saliva of these dogs, injecting it under the skin of another; but he did not get any symptoms of hydrophobia. The dog died of cellulitis and septicæmia, as has been observed in Pasteur's experiments with human saliva.

Dr. Sternberg, of the U. S. Army, made recently some experiments, by injecting saliva under the skin of dogs, in the pathological laboratory of the University of Pennsylvania, and concluded that the poisonous effects were produced only by the saliva of persons who did not smoke, or who lived in hot climates. "But," said Dr. Formad, "I am an inveterate smoker, and my saliva killed as promptly as any one's." A student of mine, Mr. Claxton, made a number of experiments, and could not corroborate some of Dr. Sternberg's conclusions. On the contrary, he found that any saliva, even that of animals, promptly killed those experimented upon.

DR. J. H. LLOYD mentioned the case of a young man who had an attack of dread of water, after a dog bite, to whom a physician whom he knew gave medicine and got the ascendancy over his fears. This he regarded as a clear case of lyssophobia.

A lady of his acquaintance, he said, had such a dread of dogs that she has been known to hang away clothes for a long time, because she had passed a dog when wearing them. She is now at her climacteric, and of a hysterical temperament. If she were to be bitten by a dog, there can be little doubt she would have hydrophobia.

DR. M. B. MUSSER had attended a child, four or five years old, which had been bitten in the face by a dog, the wound healing kindly. One month later the child had an attack like meningitis, twitching of the neck, difficult deglutition, but no opisthotonos. It died in coma, after four or five days. The question of hydrophobia was raised, but he gave a certificate of death from meningitis.

As illustrating the effect of mental impressions, he told of an old lady who had one dog, and opposed her husband's getting another. This he, however, did without her knowledge, and one day the new dog got up to her room and jumped upon her bed, frightening her into violent hysterical screams. This was due not to a fear of dogs, but to an aversion to any other than the one she already had.

DR. S. R. SKILLERN said, "The only case I ever saw was that of a boy ten years old, bitten by a pointer bitch, that was known to be especially fond of children. It had been kept in a cellar, without food or water for a few days, and afterwards, being teased, bit the boy on the scalp. The dog was killed in two or three days, without suspicion of madness. In ten days or two weeks, the child had symptoms of hydrophobia, and died. He may have been old enough to have had mental impressions about it—I don't know.

There is a popular impression among the laity that no bitch or well-bred dog ever goes mad. I do not think this one was mad."

DR. M. B. HARTZELL called attention to the belief

that a dog might communicate hydrophobia while its own disease was still in the stage of incubation, and that in real hydrophobia laryngeal spasms preceded the fear.

DR. CHARLES W. DULLES, in closing the discussion said that he had approached the study of this subject with a great deal of scepticism; and had himself been inclined to the views expressed by Dr. Mills. He had believed that hydrophobia was simply an acute mania, analogous to what is always known by this name, as well as to what is often seen in cases of grave hysteria and the nocturnal terrors of children. But, after giving due weight to the doubts cast upon many recorded cases, and after considering the difficulty of explaining according to any acceptable hypothesis another large number of them, he found that there still remained many which could not be discredited, except by assuming ignorance or carelessness, and sometimes both, on the part of some of the ablest men of our profession. These men, knowing the incredulity of others and the ground for this incredulity, still believed in the existence of this disease. Such men have asserted that they have observed hydrophobia in subjects too young for any explanation on the ground of mental impressions; infants, deaf-mutes and idiots have been known to have it.

While not prepared to assert his convictions too positively he must admit that, after eliminating all that seemed to be open to reasonable objection in connection with the belief in the existence of hydrophobia as a specific disease, there remains a residuum of fact which argues with the greatest conclusiveness for this belief.

NEW YORK COUNTY MEDICAL SOCIETY.

Stated Meeting, May 29, 1882.

DR. WM. C. JARVIS read a paper entitled *The Surgical Treatment of Chronic Nasal Catarrh, with a Practical Demonstration.* A number of new points were brought forward in the course of the reading, which were clearly elucidated by means of pathological specimens and numerous drawings enlarged from careful sketches. After eliminating several sources of error, which were productive of the unsatisfactory results obtained in the treatment of nasal catarrh, Dr. Jarvis entered fully upon the consideration of the subject.

His remarks were largely confined to a consideration of the tissue changes occurring in hypertrophic nasal catarrh. Five divisions were made, they being respectively: Hypertrophy of the turbinated tissues, thickening of the tissue over the septum, deviation of the cartilaginous septum, gelatinous polypi, and adenoma of the vault of the pharynx.

By a clear system of reasoning, he conclusively demonstrated that deviation of the nasal septum, gelatinous polypi, and adenoma of the vault, although considered as separate affections should be included as a part of chronic nasal catarrh. The first, by reason of its effects; the second, from its being either a primary agent or a secondary manifestation of the disease; and the third, an extension of the ordinary catarrhal processes to the vault of the pharynx.

Many of his views of turbinated hypertrophy now familiar to the profession had undergone no material change since their presentation. He spoke of a new feature found in connection with certain hypertrophies in effect, that many of the large, so-called sessile turbinated hypertrophies should be considered more properly as a permanent dilatation of the turbinated cavernous sinuses, or a sort of paresis of these erectile structures; he showed that the statements made in journals, that removal of gelatinous polypi by the use of his écraseur did not eradicate the base, were due to a misapprehension. In the majority of cases, on account of the peculiar shape of these growths, the wire loop was guided to the close attachment of the polypus and was sure to nip off the fold of mucous membrane, to which the polypi-pedicle was attached. The recurrence of these growths was due to the presence of clusters of embryonic polypi out of the reach of direct surgical interference and beyond the view of the operator. He had demonstrated the existence of these formations by clearing a passage to the roof of the nostril, and finding them in process of development. He explained that many of the so-called cases of deviation of the cartilaginous septum were really nothing more than distortion produced by superimposed irritative hypertrophies. He said that a large proportion of nasal catarrhs was due to years of local irritation produced by deflected cartilaginous septa, hence the comprehensiveness of the malady as the cause and effect were invariable. Much stress was laid upon restoring the symmetry of a distorted nasal gutter to avoid the ill effect of defective drainage and pressure irritation. He then brought forward a system of simple operations with new and ingenious instruments. All the abnormal conditions were admirably corrected, by his new method of operating, with little pain and hemorrhage.

MEDICAL ASSOCIATION OF CENTRAL NEW YORK.

Fifteenth Annual Meeting, held at Rochester on Tuesday, May 16, 1882.

(Specially reported for THE MEDICAL NEWS.)

THE fifteenth annual meeting of the Medical Association of Central New York was held at Rochester on Tuesday, the 16th inst.

In the absence of the President and Vice-Presidents, DR. JAMES CHAPMAN, of Medina, was chosen President *pro tem.*

After the appointment of the several committees and transaction of the usual routine business, DR. HAMLIN, of Auburn, read an exhaustive paper on the *Opium Habit*, which was highly commended in remarks by several speakers.

DR. J. O. ROE, of Rochester, read a paper on *Tumors of the Lower Pharyngeal Cavity*, and reported cases.

DR. BAMBER, of Carleton, presented a case of *Malformation of the Genital Organs.* A child, 15 months old, had a penis of normal size, with prepuce but no urethra. Below the penis was what might be called a bifurcated scrotum, presenting the appearance of the labia majora in the female. On one side (in the labia) could be felt a small tumor, the testicle. Beneath the scrotum was the urethra, from which the urine passed guttatim. The organs resembled those of a female with an abnormally large clitoris.

Most of the afternoon was occupied with the discussion of the following resolution which was offered by DR. W. S. ELY, of Rochester, who explained at length his course as a member of the committee which presented the New Code to the State Society:

Resolved, That, in the opinion of the members of this Association, the adoption of specific rules by the State Medical Society for the guidance of physicians in their professional conduct is not deemed advisable, and we would urge the entire abolition of the Code of Ethics now in force, or the substitution therefor of Dr. Roosa's simple declaration, which was presented by him at the last meeting of the State Society.

It was explained by Dr. Ely that the question would again come up at the next meeting of the State Society, and he wished to obtain an expression of the sense of this Society.

After a prolonged discussion, which was participated in with evident warmth, it was finally voted to defer

the consideration of the resolution until the semi-annual meeting in November.

The following officers were elected for the ensuing year: *President*, Dr. Theodore Dimon, of Auburn; *Vice-Presidents*, Drs. Chas. S. Starr, of Rochester, and I. N. Goff, of Cazenovia; *Secretary*, Dr. J. N. Arnold, of Clyde; *Treasurer*, Dr. Alfred Mercer, of Syracuse.

CORRESPONDENCE.

HÆMORRHAGE FOLLOWING THE USE OF MURIATE OF AMMONIA.

To the Editor of The Medical News.

Sir: In The Medical News of April 29, I see an article by A. B. Isham, M.D., reporting a case of "Purpura Hæmorrhagica, Hæmaturia, and Mucous Hæmorrhages, apparently Caused by the Administration of Ammonium Muriate." I was particularly interested in the article, as the Doctor detailed an experience similar to my own, and drew conclusions identical with those at which I had arrived.

It is with the view of adding my testimony to that of Doctor Isham's, and calling out the experience of others, that I detail a case coming under my own observation.

Mrs. J. T., married, æt. thirty-nine, of active habits, addicted to the use of tobacco and alchoholic stimulants; came under my treatment for hepatitis, on January 5, 1880. Her disease ran a typical course, passing into hepatic cirrhosis accompanied by ascites, icterus, etc.

The ascites, I relieved by the ordinary treatment, combined with local sponging over the hepatic region, with a strong current of electricity.

She has gone along for the last two years enjoying moderate health, for a person of her habits. But after one of her protracted sprees, during which icterus was a marked and troublesome symptom, I found nothing that would relieve her as efficiently as these two prescriptions, which for convenience we will call No. 1 and No. 2.

No. 1.

℞. Potass. acetat., ... ℥iij.
Infus. digitalis, ... ℥vj. M.
Sig. Tablespoonful every eight hours.

No. 2.

℞. Ammoniæ muriat., . . . ℥ss.
Elix. taraxaci comp., . . ℥vj. M.
Sig. Half tablespoonful every three hours.

After one of her usual sprees, instead of sending for me, she drank about a quart of ℞. No. 2, taking it, I suppose, as directed; taking No. 1, as directed, in the meantime. She got no better, sent for me; I found her weak, emaciated, vomiting, and bordering on delirium tremens.

I stopped all medicine, for the time being, and gave her, per rectum, a large dose of potass. brom., hydrat chloral, and ½ of a grain of morph. sulph. It quieted her, she went to sleep and slept for twenty hours, woke up refreshed. I put her on lime water and milk until her stomach seemed to act well; then I put her back on prescriptions No. 1, and No. 2. I saw her every day for ten days; she seemed to be progressing favorably, when she sent for me early in the morning.

I found her bleeding profusely from the nose, eyes, mucous membranes of the fauces, and hard palate, and the bowels. She informed me that she had been bleeding a little now and then for four days, but had said nothing to me about it. I stopped all medicine, except the potass. acetat., and put her on hydrochloric acid and sacch. pepsine. I had a great deal of trouble to control the hæmorrhage, and it was four days before I checked it entirely. I was puzzled to account for the hæmorrhagic condition at the time; but after studying the case for a day or two, I came to the conclusion that it was produced by the ammonium muriate, and acting on this, I have given her no more of the drug.

Yours, very truly,
W. T. Lucas, M.D.,
Guadalupe, Santa Barbara Co., Cal.

NEWS ITEMS.

NEW YORK.

(*From our Special Correspondent.*)

The Bellevue Staff Reorganized.—Owing to the continual strife among the faculties of the three principal medical colleges, the Bellevue Hospital College, the University Medical College, and the College of Physicians and Surgeons, for positions on the medical staff of Bellevue Hospital, the Commissioners of Public Charities and Correction held a meeting on May 12, for the purpose of arriving at a more satisfactory arrangement for filling vacancies. In accordance with a plan submitted by Dr. Austin Flint, Jr., it was decided that each of the above-named colleges should be equally represented in the Medical Board. It was further decided that a number of appointments, equal to the representation of any one of the colleges, should be held by medical gentlemen not professors in any of the above-named colleges. Each college faculty has the power to fill its own vacancies. It is also understood that if a college professor, holding an appointment on the visiting staff, resign his professorship in the college, he also loses his appointment on the visiting staff of the hospital. Patronage is further extended to each of the above college faculties by permitting them to appoint their own house staff.

The members of the old Board are as follows: Drs. Alonzo Clark, A. L. Loomis, Austin Flint, W. T. Lusk, E. G. Janeway, William Polk, W. H. Thomson, Francis Delafield, A. Jacobi, H. F. Walker, J. P. White, Lewis A. Sayre, Stephen Smith, J. W. S. Gouley, A. B. Mott, W. F. Fluhrer, C. McBurney, E. L. Keyes, C. Phelps, L. M. Yale, L. A. Stimson, and R. F. Weir. The members of the new medical board have already been selected by the various colleges and approved by the Commissioners of Charities and Correction, and are as follows:

Bellevue Hospital Medical College.

Physicians.	Surgeons.
Austin Flint,	E. L. Keyes,
E. G. Janeway,	J. D. Bryant,
A. A. Smith.	F. L. Demis.

Gynecologist, W. T. Lusk.

University Medical College.

Physicians.	Surgeons.
Alfred L. Loomis,	Stephen Smith,
W. H. Thomson,	L. A. Stimson,
F. R. S. Drake.	J. W. Wright.

Gynecologist, W. M. Polk.

College of Physicians and Surgeons.

Physicians.	Surgeons.
Alonzo Clark,	R. F. Weir,
Francis Delafield,	C. McBurney,
A. Jacobi.	T. T. Sabin.

Gynecologist, G. L. Peabody.

Non-collegiate Representation.

Physicians.	Surgeons.
James J. Williams,	J. W. S. Gouley,
W. G. Wylie,	William C. Hunter,
H. F. Walker.	Frederick Lange.

Gynecologist, Walter R. Gillette.

Drs. L. A. Sayre and A. B. Mott retire from the old board and become members of the consulting staff. Drs. Mason and Wood, of the old board, recently died. Drs. White, Fluhrer, Phelps, and Yale retire from the visiting staff of the hospital.

WASHINGTON.

(From our Special Correspondent.)

CULTIVATION OF CINCHONA IN THE UNITED STATES.—This subject was brought before the House of Representatives on May 17th by the reading of the following communication from Dr. George B. Loring, Commissioner of Agriculture, which places the matter in abeyance until further and more extended meteorological observations can be made in a few favored localities.

"In reply to the resolution 'that the Commissioner of Agriculture be requested to inform this House whether any portion of the United States is adapted to the growth of the cinchona,' I have the honor to state that for the past sixteen years the Department of Agriculture has annually distributed cinchona plants, some seasons to the amount of many hundreds, and that the reports received afford but little hope for success except in Southern California, and, so far, no trustworthy experiments have been made in that region.

"Some of the species will live in Southern Florida, notably *Sinchona succirubra*, which is one of the most robust, as also one of the most useful; but the climate of that State is not considered so promising for the establishment of an experimental plantation as the higher lands of Southern California."

"Dr. J. Elliot Howard, of England (high authority in everything relating to the cinchona), in the transactions of the Linnæan Society, remarks that ". it must be remembered that these are mountain plants, loving free air and alternate mist and sunshine, while the hot, close atmosphere of the lower lands is always injurious to their perfection as quinine-producing plants."

"The object sought to be obtained by the Department in its distribution of cinchona plants was that of making practical tests in the most promising localities in regard to their permanent introduction; this being the only safe method of procuring such information.

"The climatic conditions under which the cinchona flourishes in its native habitats have been repeatedly described and are now comparatively well known. The management of an artificial cinchona plantation is now as well understood as is the management of an orange grove.

"In the Indian cinchona plantations the best results are said to be obtained in a warm, equable, and very moist atmosphere, at elevations where the mean yearly temperature indicates 64° Fahrenheit, and in those established in Saint Helena the plants flourish well at an elevation of 1,500 feet above sea-level, in rich lands, bathed in moisture, the mean temperature for the year being 60°.

"It is shown in the reports of the Signal Office that the mean temperature for the year at San Diego is 60°, the highest monthly mean reaching 68°, in August, and the lowest monthly mean being that of 53°, in January and February. So far as thermometric figures indicate atmospheric temperature, the climate of San Diego corresponds with that of Saint Helena; but it is well known that the thermometer alone is not a safe guide in comparisons of this kind, the hygrometrical condition of the atmosphere being of equal, if not of greater, importance as regards vegetable growth, and here, as elsewhere, a well-conducted practical test with the growing plants will settle the question of adaptability.

"This, as well as many other questions of similar import, could readily be answered by this Department if means for doing so were placed at its disposal."

VIENNA.

(From our Special Correspondent.)

PROFESSOR BILLROTH AND PIROGOFF'S ILLNESS.—Much difference of opinion and discussion has occurred in medical circles over the illness of the recently deceased famous Russian surgeon, Pirogoff. The discussion has arisen from the difference in opinion of Prof. Billroth and the attendant Russian surgeons. Prof. Billroth has recently written a letter to Dr. Wywodzow, in St. Petersburg, who had sent a portion of the tumor, from which Pirogoff suffered, to Vienna. I make a few abstracts from his letter:

"More than two-thirds of the sections taken from the tumor consist of a small-celled, vessel-rich, fibro-sarcomatous tissue; upon one periphery of the section, there are, however, very distinct epithelial structures, and in one corner is a bit of exquisite epithelial-carcinoma with epithelial pearls; the latter are apparently somewhat horny and possess a peculiar bright-brownish color; whether this color was originally so, or perhaps has arisen from the employment of Peru balsam which I recommended to Pirogoff, I am not able to decide.

"From this discovery, it appears that my views of the case, as well as those of my Russian colleagues, were correct. When Pirogoff consulted me in Vienna, I had the impression that the disease had originally acted as a chronic inflammatory process in the alveolus of the last upper left molar tooth; this tooth became loose and fell out. Then the chronic imflammatory, new formation grew forth, and took on gradually the character of an infiltrated sarcomatous epulis, as I have more frequently noticed in old people. In this stage, I saw Pirogoff. The regular tumor was free from epithelium; the surfaces appeared to be granulating well, were tolerably firm, and bore no traces of destruction. The epithelium was not entirely destroyed in these places, but grew here and there, as it followed several islands of cicatricial tissue. In consequence, this epithelial growth had taken on a more proliferating and destructive character; in this manner it resulted in the partial development of a genuine epithelial carcinoma. I should like to place the progress of carcinoma formation in parallelism with lupus and other chronic ulcers. The swollen lymphatic glands, which, as I hear, appeared later behind the angle of the lower jaw, were certainly the carcinoma of infection.

"However interesting and instructive the result of microscopic investigations in such cases may be, and however the etiology of the progress of the tumor may be anatomically illustrated, yet the diagnosis of carcinoma in the present case determined me not to operate.

"A man seventy years old, although still of most buoyant spirit, yet bearing in himself all signs of bodily marasmus, with cataract in both eyes, etc., had no prospect of surviving such an operation as one would have been obliged to make, only to remain for a short time free from a recurrence of the disease. Yes, I declare to you, if such a patient was both vigorous and twenty years younger than Pirogoff was, I would not operate upon him. My experience as a surgeon, now of thirty years' duration, has taught me that sarcomata and carcinomata, beginning entirely behind the upper jaw, are never capable of radical removal by operative procedure, even if one operates with some probability of his patient surviving the operation. Behind the upper jaw an operator is so hindered, partly technically, partly anatomically, that a clean extirpation is impossible, although he may be dealing with a very exceptional case of entirely encapsuled tumor.

"I am no longer the unterrified, bold operator as you knew me in Zürich. I lay before myself now, always, the question, Would you permit this operation to be performed upon yourself if you were in the patient's position? Then, one comes, in the course of years, to a certain resignation. With every year which fate yet gives me, shall I become more affected by bad results in our art.

"I should have blamed the surgeon who would have attempted an operation upon Pirogoff. So far as I myself was concerned, I knew I could accomplish no favorable result in this case; so I attempted, through encouragement, to lift up the psychical depression of the patient, and talk him over to patience, in order to deceive him as to the significance of his suffering. That is, indeed, all we are able to do in such cases. It is really perfectly natural that my views conflicted with those of my distinguished Russian colleagues, yet I have acted as, according to my experience, I held it my duty.

"If you wish to publish this letter I have no objections. I have withdrawn forever from the literary stage at the command of surgery, and confine myself, in word and deed, to my students and patients, so long as it may yet be permitted me to work. With friendliest greetings,

"Your most obedient servant,

DR. H. BILLROTH."

MILAN.

(*From our Special Correspondent.*)

DIED, at Florence, on January 31, VINCENZO BALOCCHI, Professor of Obstetrics. He was the author of numerous and valuable obstetrical works, and his text book on obstetrics passed through numerous editions. Prof. Chiara, Director of the Lying-in Hospital of Milan, has been offered the Chair of Obstetrics in Florence, made vacant by the death of Prof. Balocchi, and has, it is reported, accepted it.

A NEW SURGICAL SOCIETY.—At Rome, on April 3, the new Society of Italian Surgeons was inaugurated. The transactions of the society will be published yearly.

PORRO OPERATIONS.—Since the successful performance by Prof. Chiara, of the last successful Porro-Cæsarean section in Milan, on October 22, two other Porro operations have been performed in Italy, the first by Prof. Morisani, of Naples; the second by Dr. Dozzi, of Motta d'Livenza, both with fatal result. The pedicle was fixed in the abdominal wound. It is very surprising that, while in S. Catharina's Lying-in Hospital, they have operated upon eight cases, and succeeded in six, in the remaining part of Italy, in twenty-nine cases we have had twenty-two deaths, or a mortality of $75\frac{85}{100}$ per cent.

EXTIRPATION OF THE UTERUS FOR CANCER.—In contrast, the results of the total extirpation of the cancerous uterus by the vaginal section have been very encouraging. For instance, Prof. Bottini, of Pavia, has operated three times successfully, and Prof. Caselli, in three operations, had two successes. In his second case, Prof. Bottini adopted an important modification, which he recommends for similar cases. As a first stage of the operation, he recommends the removal of the epithelioma and the cervix uteri with the galvano-cautery wire, but instead of cutting off the neck of the uterus smoothly with the roof of the vagina, he places the platinum loop around the superior part of the vagina, removing a small ring of the vagina, and opening also the peritoneum at the same time. According to his experience, this method is not dangerous, and the extirpation of the body of the uterus becomes easier.

THE PUBLIC HEALTH.—For the *week ending May 13*, the following additional facts have been reported. There were 3 new cases of *small-pox* reported in Brooklyn, but no deaths; 3 deaths in Hudson County, N. J.; 15 in New Orleans, and 1 in San Francisco. There is apparently no abatement of this disease as yet in New Orleans. The mortality for the 13 weeks ending April 1, amounted to 79, by far the greatest part of it occurring in the month of March. Since April 1 there have been 98 deaths, or an average of about 16 per week, which is very nearly the actual weekly number. There were only 4 deaths from this cause in New Orleans during 1881. The apparent persistence of the disease in this locality is, therefore, nothing more than a later manifestation of what has been the experience, during the past year, in nearly all other cities. The same remark applies, but less accurately, to Cincinnati, where there were but 24 deaths during the first eleven months of the year, and 35 in December, the month in which the disease first assumed an epidemic prevalence. Since the 1st of January there have been 614 deaths in this city from small-pox alone, the greatest weekly number, 65, occurring in the week under notice. In those cities where the disease prevailed more or less extensively during the whole of last year, for example, New York City, Hudson County, N. J., Philadelphia, Pittsburg, and Allegheny, Wilmington, Del., and Chicago, it has almost ceased to exist, or exists to a very limited extent, except perhaps in Chicago, where there are still a considerable number of deaths weekly.

During the year 1881, there were 4007 deaths from small-pox in 66 cities and towns, aggregating a population of considerably over 6,500,000 inhabitants. These places represent 24 different States, stretching across the continent from the North Atlantic to the Pacific Ocean. The greatest number of deaths (not considered in proportion to population) occurred in Philadelphia, 1319; next, in order of numbers, follows Chicago, with 822 deaths; New York City, with 453; Pittsburg, 444; Hudson Co., N. J., 202; Richmond, Va., 144; Wilmington, Del., 118; Allegheny, 108; Brownsville, Texas, 65; Cincinnati, 59; Brooklyn, 34, etc. December was preëminently the month of its greatest prevalence; then follow, in order, November and October. The least number of deaths, 212, occurred in July.

For the first quarter of the year 1882, in a much larger number of places, aggregating a population ot about 8,974,000, there occurred 1672 deaths from small-pox, which represents a slightly higher rate of mortality, in comparison with the population, than occurred last year. From present information, the ratio of deaths to population for the second quarter of the year will show a most decided diminution, as compared with that of the first thirteen weeks of the year. Of the 1672 deaths, 1388 were distributed among seven cities as follows: New York City, 176; Hudson Co., N. J., 99; Philadelphia, 170; Pittsburg, 231; New Orleans, 79; Cincinnati, 311, and Chicago, 322.

There were 16 deaths from *diphtheria* in Brooklyn during the week ending May 13, which is slightly above the average number during the past thirteen weeks. From the same cause there were 4 deaths in Hudson Co., N. J., and 2 in San Francisco. *Malarial fevers* caused six deaths in Brooklyn, 6 in New Orleans, and 2 in Hudson Co., N. J. From *scarlet fever* 24 deaths were reported in Brooklyn, 6 in Hudson Co., N. J., and 3 each in Buffalo and San Francisco. This disease has continued persistently prevalent in Brooklyn since the first of the year, the deaths up to the present time being 534, or about an average weekly number of 28.

Brooklyn reports 22 deaths from *consumption;* San Francisco, 20; Hudson Co., N. J., and the District of Columbia, each 16; New Orleans, 14; and Buffalo, 7. From *pneumonia* there were 36 deaths in Brooklyn; 15 in Hudson Co., N.J.; 12 in the District of Columbia; 10 in San Francisco; 7 in Buffalo; and 4 in New Orleans.

For the *week ending May 20*, we gather the following facts from the records of deaths of a number of prominent cities:—

Small-pox.—In most of the records before us, there are no deaths reported from small-pox. Cincinnati shows a slight falling off in the mortality from this disease, the deaths for the week numbering 57. New York City reports 7 deaths; Philadelphia, 6; Milwaukee, 2, and 2 new cases; Richmond, 1; Pittsburg, 5; and 14 new cases of variola and varioloid; Boston, no new cases and no deaths; Cincinnati, 57; Louisville, 5; Detroit, 1 death and 2 new cases; Wilmington, Del., 1 death; Nashville, 2 new cases; and Memphis, 3 deaths.

Cerebro-spinal Meningitis.—There was no unusual prevalence of this disease during the week past.

Croup and Diphtheria.—There is nothing specially to note with regard to croup. The deaths from diphtheria in New York City have not varied much for a number of weeks. The last week's record was 37 against 42 in the week preceding. There was a considerable increase in the mortality from this cause in Philadelphia, and, to a less extent, in Boston. The deaths were as follows: Boston, 13 deaths and 36 new cases; New York City, 37 deaths and 7 new cases; Philadelphia, 18; Cincinnati and Detroit, each 3; Milwaukee, 3; Pittsburg, 4; and in most other places not a single death recorded.

Scarlet Fever.—This disease caused 61 deaths in New York City; 11 in Philadelphia; 4 each in Cincinnati and Detroit; 3 in Pittsburg; 1 each in Providence and Boston. There were 20 new cases in the latter city and 17 in Milwaukee. The disease shows a tendency to increase in Philadelphia.

Typhoid Fever.—This fever, which has been so very prevalent in Philadelphia all winter and spring, now shows evidence of abatement. The deaths for the week were 10, which is the smallest number in any week since March 4. There were 5 deaths in New York City; 4 in Boston; 2 each in Providence, Cincinnati, and Indianapolis; and in many other places only 1 death, or none at all.

Measles and Whooping-cough.—Measles caused 29 deaths in New York City; 7 in Philadelphia; 3 in Pittsburg; and 5 in Cincinnati. At the present time this affection is quite prevalent in Philadelphia, but the type of the disease is mild. Steamers recently arriving at New York and Philadelphia, quite likely at other places, from England, have brought a number of cases of measles, more particularly among the children. Scarlet fever, as well as small-pox, has repeatedly been brought to these places during the past season by immigrants, which have been arriving in vast numbers for many months. There is need of the most judicious quarantine management if these special localities, and those whence the most of the immigrants speedily go, are to be protected from the introduction and propagation of contagious and infectious diseases. From whooping-cough there were 10 deaths in New York City, a marked decrease; and 4 in Cincinnati. Elsewhere there is nothing specially to note.

Consumption and Pneumonia.—The mortality from consumption has, as a general thing, diminished during the past week, but that from consumption in the west and northeast has increased, and, in some instances, shows an extraordinary prevalence of the disease. There were 99 deaths from consumption in New York City; 37 in Philadelphia; 10 in Milwaukee; 4 in Richmond; 8 in Pittsburg; 25 in Boston; 18 in Cincinnati; 10 in Louisville; 8 in Detroit; and 5 in Providence. From pneumonia, there were 120 deaths in New York City; 53 in Philadelphia; 22 in Boston; 14 in Cincinnati; 5 in Providence; and 3 each in Louisville and Detroit. In New York City and Philadelphia, the mortality from this disease has equalled, if not exceeded, that of any week during the most favorable season for its prevalence.

HEALTH IN MICHIGAN.—Reports to the State Board of Health for the week ending May 13, 1882, indicate that neuralgia, membranous croup, and scarlet fever increased, and typho-malarial fever decreased, in area of prevalence.

Including reports by regular observers, and by others, small-pox was reported present during the week ending May 13, and since, at eight places as follows: at East Saginaw (two cases), at Detroit (three new cases), at Flint (two cases), at Pontiac (one case), at Saginaw City, at Wayne County Poor House (three cases), at Manistee (two new cases), May 15; at Plainwell (four cases of supposed varioloid), May 17, 1882.

AMERICAN SURGICAL ASSOCIATION.—The third annual session of this Association will be held at Philadelphia on May 31, June 1 and 2, 1882, in the Hall of the College of Physicians, northwest corner of Thirteenth and Locust Streets.

The meeting will be called to order on Wednesday, May 31st, at 11 A. M., by the President, Prof. S. D. Gross, who will deliver an address of welcome; after which the Association will proceed to private business. At 3 P. M., Prof. J. L. Catell, of the University of Virginia, will read a paper on *Sanitary Conditions in Relation to the Treatment of Surgical Operations and Injuries*, followed by Dr. W. W. Dawson, of Cincinnati, by a paper on *The Value of Esmarch's Bandage as a Surgical Appliance.*

On Thursday, June 1st, at 11 A. M., there will be a business meeting followed by a paper by Prof. Moses Gunn, of Chicago, on the *Treatment of Fractures of the Skull, Recent and Chronic, with Depression*, and a paper by Dr. R. J. Levis, of Philadelphia, on *The Treatment of Transverse Fracture of the Patella, with the Object of Producing Bony Union.* At 3 P. M., Dr. J. R. Weist, of Richmond, Indiana, will read a paper on *Foreign Bodies in the Air-passages*, and Prof. M. T. Briggs, of Nashville, a paper on *The Antiseptic Treatment of Wounds after Operations and Injuries.*

On Friday, June 3d, at 11 A. M., the Association will meet for the election of officers and the transaction of private business, and at 3 P. M. for the reading of volunteer papers and the exhibition of cases. The Committee of Arrangements have been notified that volunteer papers will be presented by Prof. S. W. Gross and Dr. J. Ewing Mears, of Philadelphia.

During the session there will be an exhibition of surgical instruments and appliances by the leading instrument makers of this city and New York.

DEATH FROM CHLOROFORM.—A case of death from the administration of two drachms of chloroform by a dentist for the extraction of teeth is reported in the *Omaha Herald* of April 28, 1882. The patient was a woman aged 35, and had a diseased heart and kidneys; three weeks before she had taken chloroform, which was administered by the same dentist, without any bad effect.

A MEMORIAL statue of Albrecht von Graefe, the eminent ophthalmologist, has been erected in Berlin, and was unveiled on May 22, his birthday.

THE PRESBYTERIAN HOSPITAL.—Dr. C. Galen Treichler, one of the physicians who brought the patient alluded to in our editorial of last week to the Presbyterian Hospital, preferred charges against Dr. Allis, the visiting surgeon, for neglect of duty, in a letter to the Board of Managers. At their meeting, on the 15th

of May, the Board investigated the facts most rigidly, and, we are glad to state, arrived at the following conclusion:

Resolved, That the Board, having considered the communication of Dr. C. Galen Treichler, and having inquired into the circumstances of the case referred to, find no occasion to censure the surgical staff.

STATISTICS OF THE MEDICAL CLASS AT THE COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.—A glance at the list of graduates who received their diplomas last week shows an unusual proportion of candidates who had previously obtained degrees either in literature or in the sciences. The Class of '82 numbered 105 in all, of whom a little more than one-third, or about 35 per centum, possessed the degree of A.B., A.M., B.S., Ph.B., or M.D., graduates of other medical schools often preferring before they enter upon active practice to pass a session at the College of Physicians and Surgeons, and append its diploma of medicine to that of some other school already conferred upon them. In the present agitation for reform in medical education and advance of standard, this record is certainly encouraging. Recently the short session at the College has been abolished, and a session of seven months per year has been adopted, the course being preferably three years. Of more interest to the cause of elevation of standard, however, is the catalogue of undergraduates. There were 555 students in the College; and of that number 202 already possess degrees of A.B., A.M., B.S., Ph.B., or M.D. The percentage thus represented is about 40 per 100—an advance upon that of the last class.

THE NEW YORK STATE MEDICAL SOCIETY AND THE NEW CODE.—Dr. E. R. Squibb, in this month's *Ephemeris*, says "that no radical and unexpected action of fifty-two members out of a profession of more than 3,800 can be settled without an acquiescence of a majority of those represented in the action, and who are to be governed by it. Hence it is but fair and wise that some measures be taken to ascertain whether or not this action be acceptable to, or be acquiesced in by, a majority of the profession represented in the State Society.

Therefore, in order to allow the whole profession an opportunity to express itself through its organizations, and thus definitely settle this matter one way or the other, the following preamble and resolutions will be offered at the first session of the annual meeting of the State Society, in February, 1883, and they are published now with the hope that all the county societies will take them up, and having discussed them freely and fully, will, by communications to the State Society through their delegations, pronounce definitely for or against repealing the action of this year. If any county societies be not heard from on the subject at all, of course it must be held that they approve of and acquiesce in the action; but it would be much better and more straightforward and manly to have the approval expressed. At any rate, the resolutions will give an opportunity to every county society and every permanent member to vote on one side or the other of the most important question which has come up in the profession for many years; and they will serve to remind all those who do not vote that their silence and inaction will be fairly construed into acquiescence, and make them morally responsible for any harm that may ensue.

Whereas, The Special Committee on the Code of Ethics, in its report at the last annual meeting, recommended a change in one part of the Code which was more in the nature of a revolution than of a revision, and, therefore, may be more radical than was expected or desired by the constituency of this Society; and

Whereas, That report was adopted at a session wherein only fifty-two members voted in the affirmative, and thus legislated for the entire profession of the State on a subject of vital importance in a direction which may not have been anticipated or desired by the profession at large.

Therefore, for the purpose of bringing the matter before the whole profession of the State for more general and more deliberate action, be it

Resolved, That all the action taken at the annual meeting of 1881, in regard to changing the Code of Ethics, be repealed, leaving the Code to stand as it was before such action was taken.

Resolved, That a new Special Committee of five be nominated by the Nominating Committee of the Society, and be appointed by the Society to review the Code of Ethics, and to report at the annual meeting of 1884 any changes in the Code that may be deemed advisable.

Resolved, That the report of this Committee be discussed at the meeting of 1884, and be then laid over for final action at the meeting of 1885.

Should this preamble and resolutions, after being freely published for consideration during the remainder of this year, and after being sent, as they will be, to the president of every county society of the State, be defeated as a whole when it is put to vote, then the action of this year will stand confirmed by the whole profession of the State, and it will be then definitely settled that the old Code of Ethics needed but little change, excepting that consultation with legally registered quacks of all kinds, which were before prohibited, should now be permitted.

If the preamble and resolutions should be admitted, the preamble would be adopted as a mere recital of the facts, and the test vote would be upon the first resolution. If that was defeated, it would necessarily defeat all the others, and would be equivalent to rejecting the preamble and resolutions as a whole. But, should the first resolution be carried, it would leave the whole matter exactly where it was before the appointment of the special committee, and then the question would be upon the second resolution. If this should be defeated, the defeat would carry with it the third and dependent resolution, and the effect of this defeat would show that the society was satisfied with the old Code of Ethics as it has stood for so many years; or at least would show that as yet it was not sufficiently dissatisfied with it to run the risk of making changes at present which might prove hurtful rather than beneficial.

If, however, the second resolution should be adopted it would raise a new committee having the same precept or duty as the previous special committee. But this new committee would be appointed in a very different way, and in a way very much more in harmony with so important a matter. The Nominating Committee of the Society being made up anew every year by the delegates and permanent members of each of the eight old senatorial districts of the State, meeting and selecting one of their number for this important committee, is necessarily a very fair and impartial committee, and comes afresh very directly from the constituency of the State Society. If this nominating committee of nine men, fresh from all parts of the State, should nominate this special committee just as they nominate the officers of the Society, and then if the Society should confirm or modify the special committee so nominated, then the committee would be a far better representative of the will and the wishes of the profession at large than if appointed, as the last one was, by the President of the Society.

Should the first and second resolutions be carried, and the third one be defeated, then the Society would proceed at once to a final action on the report of the committee, and should there happen to be only a few

members present, the important result would be reached through the bias of a two-thirds vote of the few, and the matter would have to be undone, if afterward it did not meet the approval of the many.

But, if the third resolution should be carried, the subject could be discussed as freely as might be desired, and would then go over for a year, thus giving plenty of time for any amount of deliberation and writing, and would come up for final action before a new audience fresh from the total constituency of the Society. By this course a much larger proportion of the profession could think and act upon it with the chances for a much wiser decision. An effort was made at the last meeting to have the report of that special committee discussed and laid over for a year, so as to come up for final action at the next annual meeting, but the motion was summarily defeated, and a final action was taken which careful deliberation does not sustain, and which probably could not have been taken in February next. This precipitate forcing through of an unexpected revolutionary measure by the mere power of six votes in a meeting of seventy votes, representing a constituency of over 3,800, is a kind of legislation always to be deplored, and which, by its very precipitancy and urgency, is far more likely to be wrong than right. The whole object of these resolutions is to ascertain whether, in this particular instance of this kind, the action taken was wrong or right as judged by the profession to which it is thus arbitrarily applied.

The resolutions will be offered at the first session of the meeting of February, 1883, and the Society will be asked to appoint a special session for their consideration, so that all may be present who desire to be.

THE TENNESSEE STATE MEDICAL SOCIETY AND THE NEW YORK CODE.—The Tennessee State Medical Society, at its late annual meeting, unanimously passed resolutions condemning the New York Code.

THE SPRINGFIELD (MO.) MEDICAL SOCIETY AND THE NEW YORK CODE.—The Springfield Society has adopted resolutions declaring its "continued adhesion to the doctrine laid down in the Code of Ethics of the American Medical Association," condemning the New York Code, and directing its resolutions on this subject to be presented to the State Society.

WHAT IS SAID OF THE NEW YORK CODE OF ETHICS.

The New York State Medical Society has taken medical ethics into its own hands, and has passed a law that sanctions consultation with any person holding a legal qualification to practice—that is to say, with eclectics, homœopaths, etc.—so long as they are licensed. This idea is not original; it will be remembered by our readers in connection with the addresses of Dr. Bristowe and Mr. Jonathan Hutchinson at the Ryde meeting. These gentlemen knew the sentiment of the profession too well to put the idea into the form of a rule of ethics or of practice. But the New York State Medical Society is more bold, and has passed the law. But it has reckoned without its host. The whole feeling of the profession in the States is against the step taken by the Society, unless it be some New York medical papers, which we may assume to be under the guidance of those who lead the Society. We need not say that the law is against the Code of the American Medical Association, which, while enjoining all reasonable liberality in meeting intelligent regular practitioners that will be acceptable to the patient, adds—"*but no one can be considered as a regular practitioner or a fit associate in consultation whose practice is based on an exclusive dogma*, to the rejection of the accumulated experience of the profession and of the aids actually furnished by anatomy, physiology, pathology, and organic chemistry."

This is the language of common sense and of loyalty to science, and evidently expresses the feeling of the profession in America, as it does that of the profession here. It is important to notice the fundamental error at the root of the regulation of the New York Society. It assumes that the mere qualification of practice is a guarantee of everything necessary; as if there were no need for a code of ethical principles between medical men. This is a great mistake. The standing of the profession in society and the respect in which it is held by the nations have their explanation as much in the high character of the ethical principles by which the conduct of its members is regulated as in the intellectual and scientific nature of their calling. A great part of medical ethics has always had reference to the mutual relations and obligations of medical men; so that the mere fact of men being equally qualified in the eye of the law does not dispose of the moral questions which arise in practice, one of which is the amount of respect due to those who assume the truth of exclusive dogmas, and swear by one teacher, to say nothing of the absurdity of the dogma and the discredit of the teacher. Our law very properly provides that the holding of any particular theory of medicine by a candidate shall not entitle an examining board to reject him. In free countries men must be allowed to believe things which to most of their fellows seem absurd. But that is no reason why the bulk of the profession should not act in defence of its dignity, or why they should not be at liberty to decline professional consultation with those who would lower the tone of medical science. Rather is it the very reason why medical societies should do what it is scarcely to be expected that the common law should undertake. We are assuming that the case is clear, that the shibboleth adopted is something inconsistent with the broad light of medical experience and common sense. This is the case of homœopathy, which is practised in its purity now by scarcely any of those who trade upon the word, and yet which is nothing if it is not exclusive. Its chief disciples have shown a readiness to abandon everything but the name, which has a sort of trade value among a certain section of the public. Such being the discreditable position of homœopathy we do not wonder that the professional opinion of the United States is strongly against the action and the ethics of the New York Medical Society.—*The Lancet.*

The regular profession cannot afford to be regarded as the most illiberal, and it is fast approaching this unenviable reputation on account of its adherence (?) to a Code that is as illiberal as it is narrow. . . . Reform is necessary, and will eventually accomplish itself.—*The St. Louis Medical and Surgical Journal.*

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT, U. S. ARMY, FROM MAY 16 TO MAY 22, 1882.

Lieutenant-Colonel GLOVER PERIN, *Surgeon;* Major WM. C. SPENCER, *Surgeon;* and Captain PHILIP F. HARVEY, *Assistant Surgeon.*—Directed to represent the Medical Department of the Army, at the annual meeting of the American Medical Association, to be held in St. Paul, Minn., on June 6, 1882.—*S. O. 114, A. G. O., May 17, 1882.*

THE MEDICAL NEWS *will be pleased to receive early intelligence of local events of general medical interest, or which it is desirable to bring to the notice of the profession.*

Local papers containing reports or news items should be marked.

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